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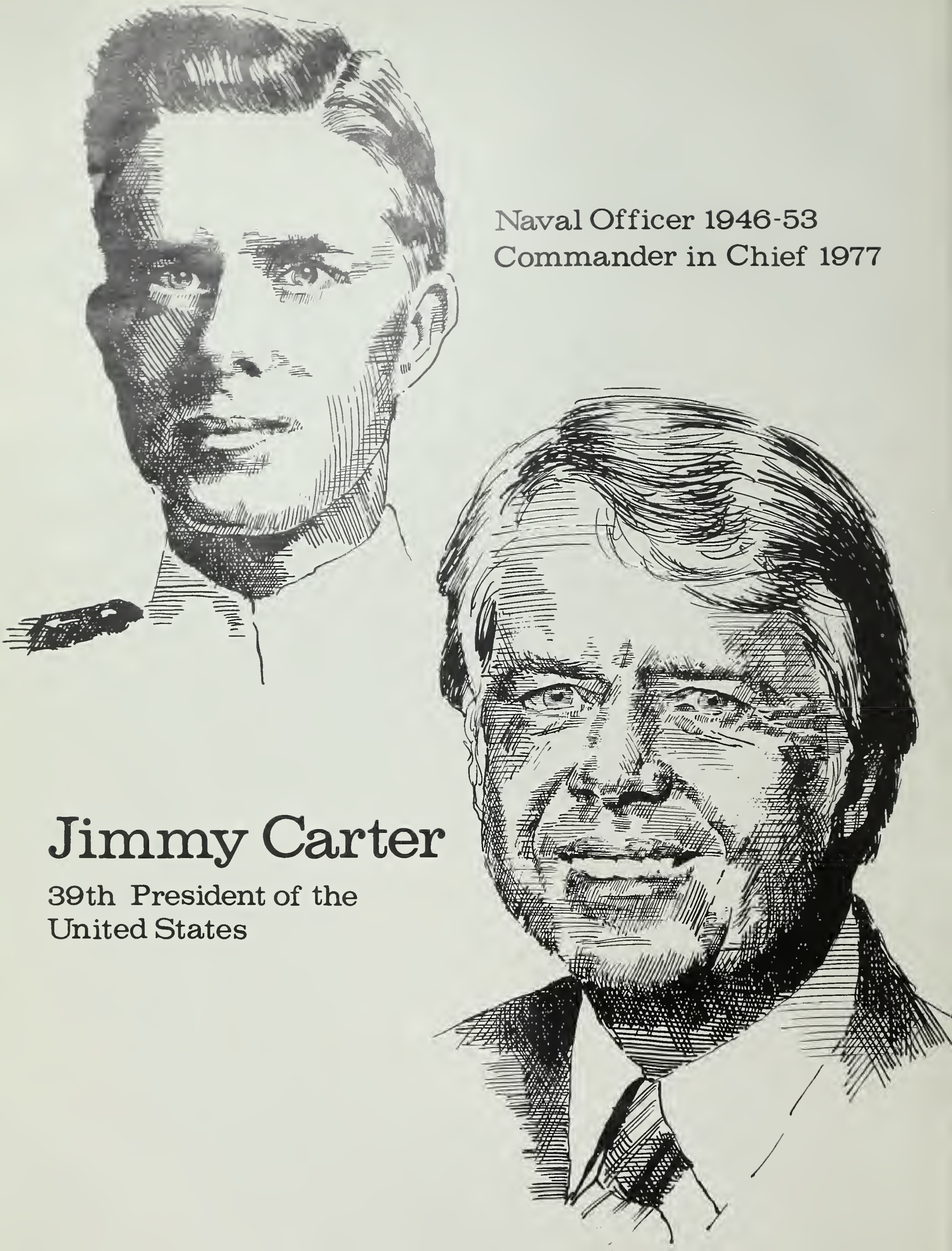

Naval Officer 1946-53
Commander in Chief 1977

Jimmy Carter

39th President of the
United States

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ALL HANDS

MAGAZINE OF THE U.S. NAVY — 54th YEAR OF PUBLICATION
FEBRUARY 1977 NUMBER 721

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Covers:

Front: Navy co-captain Jeff Sapp's expression tells it all — Navy's the winner again. Sapp, described by coach George Welsh as "the best defensive middle guard in the country," ended the 1976 season with 143 tackles, was tapped for a host of all-American squads and won a berth on the East Squad in the Japan Bowl Game in Tokyo. (Photo by JO1 Jerry Atchison)

Inside Front: Art by staff artist LT Bill Ray
Back: Photo by JO2 Gary Grady

Chief of Naval Operations Admiral James L Holloway III
Chief of Information Rear Admiral David M Cooney
OIC Navy Internal Relations Activity Ceptain Edward G McGrath
Director, Print Media Division Lieutenant Commander D McCurrach
Editor John F Colemen
Production Editor LT John Alexander
Research Editor Ann Henebury
Layout Editor E L Fest
Art Editor Michael Tuffli

Staff LTJG Bill Rey
JO1 Jerry Atchison
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Elaine McNeil

Currents

Navy Seeks Major Sea Pay Hike

● The Navy has developed a proposal providing for a big increase in sea pay – unchanged since 1949 – to seagoing Navy careerists. Under the new plan, which provides for payments from $25 to $100 monthly, a sailor would be eligible for sea pay if he had completed three qualifying years at sea, was serving aboard a ship whose mission is primarily accomplished underway, and had been advanced to petty officer grade. The new sea pay plan has been endorsed by the Department of Defense for forwarding to the 95th Congress. Target date for payment of the increased rates is 1 Oct. 1977.

President Names New Secretaries

● Dr. Harold Brown has been appointed Secretary of Defense and W. Graham Claytor Jr. has been named Secretary of the Navy by President Jimmy Carter. Dr. Brown has served as president of the California Institute of Technology and once headed the Livermore Nuclear Laboratory. He was director of research and engineering in the Department of Defense and took part in the SALT II negotiations. Dr. Brown also is a former Secretary of the Air Force. Claytor, a lieutenent commander during World War II, served as commanding officer of the submarine chaser USS SC 516 and the destroyer escorts USS Lee Fox (DE 65) and USS Cecil J. Doyle (DE 368). Until recently he was chairman of the board and chief executive officer of the Southern Railway System.

First Trident Missile Launch Successful

● The first flight model of the Trident missile successfully completed its planned flight of more than 4,000 miles after being launched from Cape Canaveral recently. This was the first in a series of test firings of the new long-range missile. The new missile will be capable of submerged firing from both the Poseidon and the new Trident fleet ballistic missile (FBM) nuclear-powered submarines. Improved solid propellant, electronics and materials give the Trident missile much greater range than the currently deployed Poseidon missile. The Trident missile will carry a multiple, independently targeted reentry vehicle (MITV) warhead to a range of 4,000 miles. The missile is guided by a self-contained inertial guidance system, independent of external command and controls once it is launched. It is approximately 34 feet long and six feet in diameter and weighs in excess of 65,000 pounds. The first submerged launch from a Trident submarine is planned for the summer of 1979. The placement of Trident missiles in Poseidon submarines will begin in 1979. Modifications of Poseidon submarines to accommodate the change to Trident missiles can be accomplished alongside a tender.

POVs Subject to Strict Inspection in Japan ● Military personnel who bring their personal vehicles to Japan may encounter problems and considerable personal expense in order to license and drive their vehicles in the country (including Okinawa). Vehicles manufactured before April 1, 1976 must meet the 1973 Government of Japan inspection standards which are not too severe. However, those vehicles manufactured after March 31, 1976 must be inspected under the 1975 Government of Japan emission standards which are very strict. This inspection under the 1975 standards is only done in Tokyo, at personal cost (in the neighborhood of $500) and takes from 90 to 130 days. If a vehicle was manufactured after March 31, 1976, it may only be shipped to Tokyo. Once it arrives there, it becomes the member's personal responsibility, including any further transportation costs to the member's particular duty station in Japan or Okinawa. All vehicles having a catalytic convertor must have the convertor operational and must have a heat shield and warning light installed at an approximate cost of $200-$400. Further, unleaded gasoline is not available in military PX service stations and must be purchased on the economy for about $1.50 per gallon.

3,000-Ton SES to be Constructed ● A contract to build a 3,000-ton Surface Effect Ship (SES) prototype designed to travel at speeds three times faster than conventional ships was recently awarded to a San Diego firm. The ship is scheduled for completion in fiscal year 1983. This SES will be 270 feet long, 105 feet wide and will be powered by gas turbine engines. The 3,000-ton prototype will be capable of carrying 125 officers and men.

PREP Program Revised Under New GI Bill ● The Veterans Administration Pre-Discharge Education Program (PREP) is now available only to service personnel participating through financial contributions. PREP provides on-base education for those who seek high school level remedial, refresher or completion courses. Participation is limited to the last six months of the first enlistment and applicable to those entering the service after Dec. 31, 1976, provided they had not joined under the Delayed Entry Program prior to Jan. 1, 1977. Individuals enrolled in PREP courses by Oct. 31, 1976 may continue to complete the course but may not reenroll for courses beginning on or after Nov. 1, 1976. Cost of tuition for high school level courses may be charged to the service member's VA entitlement if the courses are taken within the 50 states. For further information see NavOp 161/76 or see your command education officer.

CNO Sailors of the Year Nominees Sought ● Fleet and shore commands have begun screening Sailor of the Year nominees. Competition ends April 15, and names of the fleet Sailors of the Year and shore command nominees must be submitted to the Chief of Naval Personnel by May 6. A board established by the Chief of Naval Personnel will select the shore Sailor of the Year. Winners will be announced in the summer of 1977 and awarded five-day vacations at CONUS locations of their choices and meritorious promotions to the next highest paygrade if they meet all requirements.

The Sea Releases Her Grasp

BY JO1 CHRIS CHRISTENSON

An eight-week battle against the frigid and stormy North Atlantic to retrieve an F-14 *Tomcat* lost from USS *John F. Kennedy* (CV 67) during a NATO exercise, ended in November, when the mangled remains were finally recovered. The recovery ended an exhausting, frustrating and, ultimately, triumphant chapter.

The F-14 had careened across *Kennedy's* flight deck, and into the sea after one engine jammed at full power, during launch preparations in September. The two-man crew ejected safely onto the deck of *Kennedy*.

When the F-14 made its unscheduled departure north of Scotland, the Navy was faced with a decision to leave it or retrieve it. The decision to retrieve the plane set in motion a long chain of events which resulted in the recovery of both the fighter and her *Phoenix* missile.

The Navy's Supervisor of Salvage made plans for a two-stage operation. USS *Shakori* (ATF 162) was specially outfitted with side scan sonar and special navigation equipment and began the search phase. Streaming a torpedo-shaped sonar "fish," *Shakori* painstakingly established a grid search pattern. Steaming back and forth on predetermined search lines, *Shakori* found a promising contact on Oct. 3.

The ship put into port at Aberdeen, Scotland, for supplies and further planning. Returning to sea several days later, *Shakori* discovered that the "promising contact" was not to be found. Undaunted, she continued the search and was able to relocate the contact—several hundred feet from its original location.

The second stage of the operation was now about to begin with the arrival of the Norwegian flag vessel M/V *Constructor*, with CURV III, an unmanned U. S. Navy submersible, on board. The plan called for CURV to use her television cameras to positively identify the contact as the missing F-14. On subsequent dives CURV was to bring down and attach an eight-inch nylon lift line.

The plan didn't work. An electrical failure knocked CURV out of action and the Navy ordered in *NR-1*, a nuclear-powered research submarine, to aid in the operations. *NR-1* arrived on scene and quickly identified the plane.

But she also discovered that the F-14 was badly fouled in a heavy fishing net, and that the sophisticated *Phoenix* missile was not attached.

The recovery stage began with the *NR-1* hooking a nylon line 30-feet long and 10 inches in circumference around the starboard main landing gear of the *Tomcat*. On October 26, *Constructor* lowered a hoisting line to *NR-1* which connected it to the line previously attached to the landing gear. *Constructor* then passed the hoisting line to the British flag vessel M/V *Oil Harrier*.

Oil Harrier was able to raise the plane near the surface. She then proceeded to slowly tow it toward shallow water. After traveling some three miles, however, shifting ocean currents, high winds and choppy seas

produced too much tension in the lift line and it failed.

But this time the plane landed, wheels down, so the *NR-1* could not get close enough to place another loop around the landing gear, so it was decided to use the 30-foot line already attached for the next lift attempt. Adding to the complications was the fishing net in which the plane had originally become entangled, for the net now constituted a danger to a submersible trying to get close to the plane. The next day, a replacement 10-inch-circumference, nylon lift line provided by *Shakori* was passed by *Oil Harrier* to *Constructor*. Again, *Constructor* positioned the line for *NR-1* which made the hookup to the 30-foot line, and passed it back to *Oil Harrier* for hoisting. The lift commenced at 2230 and at 0100 the line parted for the second time, allowing the aircraft to fall back to the seabed, again with wheels down. When the line was recovered, it was discovered that the failure had occurred in the 30-foot section that had been heavily stressed in both lifting evolutions.

While the salvage team considered what to do next, *NR-1* began searching for the *Phoenix* missile. On October 30, the missile was located, and the next day *NR-1* succeeded in lifting the weapon to the surface, using her remote grapple.

Putting an alternate plan into effect, M/V *Constructor* and M/V *Oil Harrier* were replaced by the German flag salvage vessel M/V *Taurus* and the large British trawler M/V *Boston Halifax*. An additional vessel, the German salvage support ship SS *Twynford* accompanied the group back to the recovery site. When trawling for the aircraft with a special steel trawl net by *Boston Halifax* proved unsuccessful, *Taurus* and *Twynford* towed a wire drag and succeeded in snaring the aircraft. With both ends of the wire drag on *Taurus'* winches, the aircraft was towed submerged almost ninety miles to shallow water off the coast of the Orkney Islands. Here, U. S. and German divers attached additional cables and the aircraft was finally brought aboard.

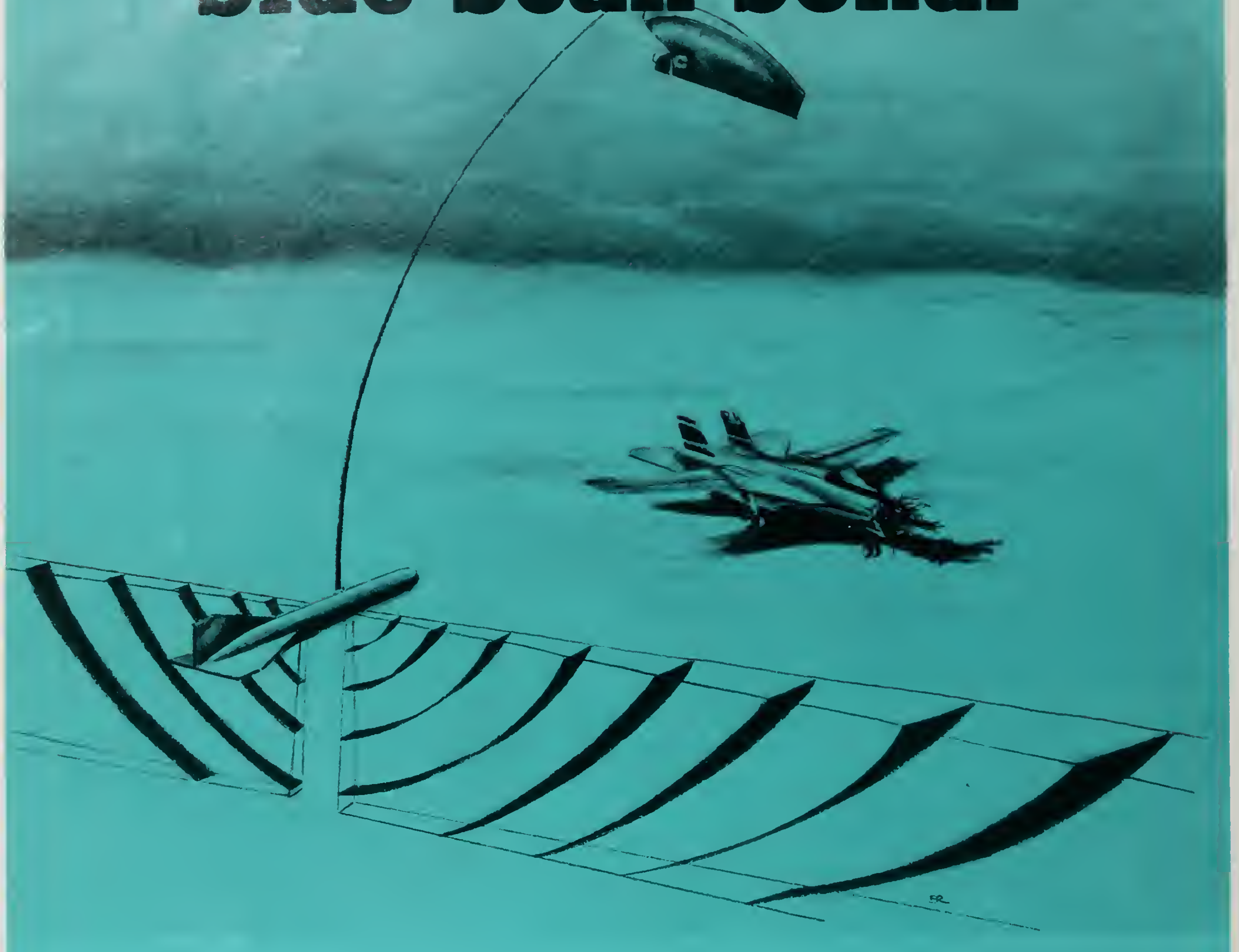
Admiral David H. Bagley, Commander in Chief U. S. Naval Forces Europe praised the combined efforts of the navymen involved: "During the past eight weeks you have worked and performed admirably under the most adverse conditions. Your perseverance and flexibility in meeting and overcoming the varied problems of this successful deep ocean recovery with limited assets, is a source of admiration and pride to all of us who realized the complexity of the task you have performed."

→

Left: Phoenix missile on the ocean bottom as seen from the nuclear-powered research vessel, NR-1.
Below: Taurus crew begins hoist of mangled F-14 onto deck. Photo by PHC M. W. Melton.

The Eyes of the Search

Side Scan Sonar



The hundreds of men, numerous ships and mix of equipment that searched for the sunken F-14 all depended on one device—side-scanning sonar. It provided them with the eyes they needed thousands of feet beneath the surface of the ocean.

USS Shakori *(ATF 162) towed the side-scan sonar—a torpedo shaped "fish"—that picked up a promising contact eventually identified as the missing F-14. Side-scan sonars are towed astern of a vessel near the seafloor. They are controlled by the mother ship's speed and the length of the towing cable.*

They emit short acoustic fan-shaped pulses that bounce off objects. The information is sent to onboard graphic recorders where a record similar to an aerial photograph is made.

The Navy had plenty of "muscle" on the F-14 search site. But the "eyes" of that search made the difference between success or failure.

Engineering Specialist

High priority in Navy's future

A plan to regenerate and redirect the Navy's most important team of engineering specialists—a community of restricted line officers called Engineering Duty Officers (EDs)—was approved by the Chief of Naval Operations in October 1976. These changes will affect not only the ED community, but the entire Navy as well.

Vice Admiral C. R. Bryan, USN, COMNAVSEASYSCOM, a career ED, directed the study group which formulated the planned changes. In the following interview, VADM Bryan discusses the "new look" of the engineering duty officer community.

Q. *Admiral Bryan, what does this extensive overhaul of the ED program mean in terms of our Navy's ability to carry out its mission?*

A. The Navy's ability to fulfill its mission depends on the number and quality of modern warships we can build, and on the material readiness of existing ships and combat systems. Most Navy people are acutely aware of problems being encountered in these areas: shipbuilding costs; claims disputes with some shipbuilders; extensive work required to catch up on the ship overhaul requirements; and simply keeping our ships and equipment in an up-status when deployed. Engineering Duty officers have important responsibilities related to all these matters, and must nurture and maintain the degree of technical competence and experience in ships, ship combat systems, and ordnance and electronic systems necessary to solve these problems.

The ED study, completed in August 1976, recommended ways to improve the Navy's ability to do this job. CNO has directed that the recommendations be implemented.

Q. *Admiral, why was a study of the ED community ordered initially and what changes were deemed necessary?*

A. Based on his own experience and the advice of his advisors, the CNO ordered the formation of a study group to investigate the role of the ED community in light of increasingly sophisticated shipboard systems and complexity of their maintenance. He noted that there was a clear need for a comprehensive review of the fundamental requirements for EDs and also for a specific determination of their role in the Navy today and in the future.

Through the years, the EDs are hardworking, dedicated officers. To fulfill their roles for the Navy of the future and achieve lasting solutions for the problems I mentioned earlier, we need even more technical expertise and involvement by EDs than we have had. Our study has shown that we need to train existing EDs more, and we need to recruit new people who have the potential to perform at extremely high levels of technical competence.

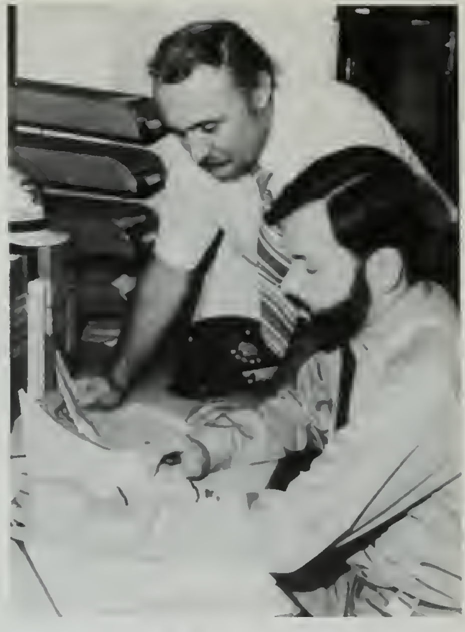
Q. *What precise roles did the study group envision for the future ED community?*

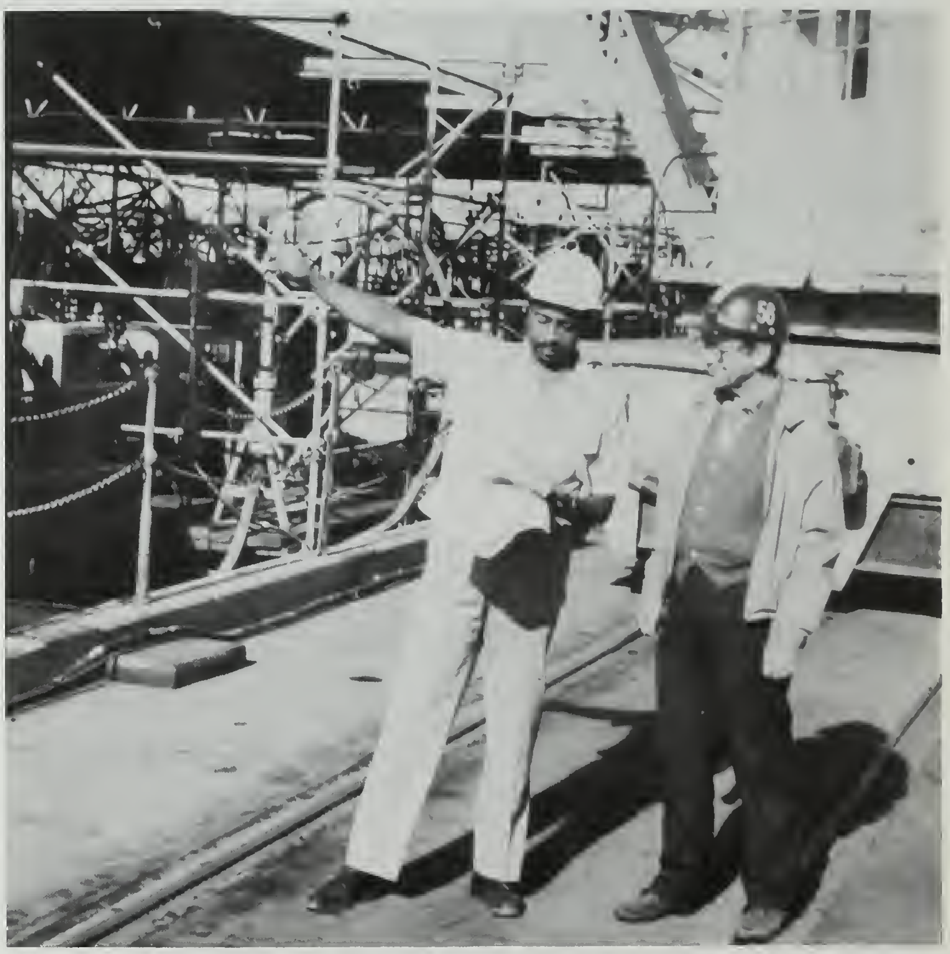
A. We felt that one of the key problems in the past has been a lack of a clear-cut definition by the Navy of the ED's role.

The group determined that the Navy needs EDs who are highly trained, experienced, professional naval engineers capable of technically supervising the design, acquisition and maintenance of ships and combat systems. That means EDs should be ready and able to accept personal responsibility for technical matters in assignments involving ships and combat systems, and other associated areas.

Q. *How does the Navy plan to develop the kind of ED community it wants?*

A. Several changes are anticipated. The fundamental one involves an aggressive effort to bring in the kind of technically qualified people we need. It means selling the ED career field to qualified students at the Naval Academy, NROTC units and Officer Candidate School. We were formerly unable to assign people to the program directly from the Academy and NROTC, but those avenues are now being opened.





Q. *What is the relationship between the Unrestricted Line subspecialist and the ED?*

A. There is a need for high quality URL subspecialists in the design, acquistion and maintenance of ships and combat systems, to provide operational experience and that degree of direct technical contribution appropriate to their subspecialty. The URL material support selection board recently completed a review of the URL community to identify individuals qualifying as proven subspecialists. The review board recommended designation of 331 new proven material support and the continued proven subspecialist designation of 629 officers in the grade of lieutenant commander through captain.

However, as a result of stringent selection standards, proven subspecialist designation for 425 officers (90 lieutenant commanders, 217 commanders and 118 captains) was deleted.

Q. *What are the plans for improving qualifications of EDs once they are in the engineering community?*

A. First, we want to ensure that the jobs EDs are assigned make the best use of their abilities and develop their potentials as officers and engineers. This will require some changes in the ED billet structure. Since EDs must be competent naval officers first, they should have sea duty experience early in their careers. At more senior levels, however, EDs will no longer be assigned as engineering officers aboard individual ships. Such an assignment is more properly the role of the unrestricted line specialist. EDs at sea will serve as tender repair officers and main propulsion assistants on some carriers.

There will continue to be EDs in key fleet and type commander maintenance jobs. More emphasis, however, will be placed on ED direct involvement—technical involvement—in design and shipbuilding.

Q. *What about education and training for EDs of the future?*

A. The right kind of education is crucial to fulfilling the ED role and was carefully considered by the study group. A bachelor's degree in a scientific or engineering field was considered a valid prerequisite. The Engineering Duty Officer's Basic Qualification Program, already in effect, was endorsed as an important training milestone early in an ED's career. Finally, a two-year postgraduate program in a field related to ships, ship combat systems, or ordnance and electronic systems was determined to be appropriate advanced training.

Subject to Navy requirements, selected officers may be authorized to continue beyond the master's level to permit concentrated study in the application of their technical specialty to the design of ships, ship and combat systems, and ordnance and electronic systems. Although some aspects of management such as contracting and finance are important, the emphasis at postgraduate school is clearly on the side of technical know-how.

There will continue to be a need for specific management training through selected short courses in certain disciplines and through courses available at the Defense Systems Management College at Ft. Belvoir, Va. The management of our ship and weapon system acquisition programs will be improved in direct proportion to the degree of solid technical expertise behind that management. Many competent engineers have become successful managers; I do not know of any mediocre or poor engineers who ever became good managers.

Q. *Were current billets reserved for EDs reviewed?*

A. Yes, each senior key position was analysed to determine whether the position was, in fact, needed and, if so, the required grade required to fill it. The group then recommended the category of individual best qualified to perform the assignment, whether an ED, URL, staff corps officer or civilian. The group identified 178 captains' billets as "key," but due to the complexity of the career field and short time available for the study, a similar careful evaluation of other ED billets may require adjustments to this list.

Q. *You mentioned the need for advanced education for EDs. Where is this advanced education usually obtained?*

A. Postgraduate education for EDs is normally through either the Naval Postgraduate School, Monterey (NPS) or Massachusetts Institute of Technology (MIT). Study at NPS is generally a two-year effort leading to a master's degree in engineering or an associated technical area. Study at MIT is a two- or three-year effort leading to a master's or an engineer's degree.

A technical master's degree, however, is sufficient in most instances for proper accomplishment of ED duties.

Summary

The engineering duty officers of the future will be actively recruited, provided specific ongoing professional training and assigned to the jobs, both ashore and afloat, where their expertise can most benefit the Navy.

An active program of regenerating the Navy's most important team of engineering specialists takes high priority. It will ensure that top-caliber people become the EDs of tomorrow.

At the same time, sharply focusing on the duties and responsibilities of the ED will guarantee that when they are called upon, they will truly be the "experts" the Navy must depend upon in this technological age.

And, finally, EDs will continue to be naval officers and professional engineers. But they will also possess the solid, "hands-on" type of experience and training required of people knowledgeable of complex systems. ⚓

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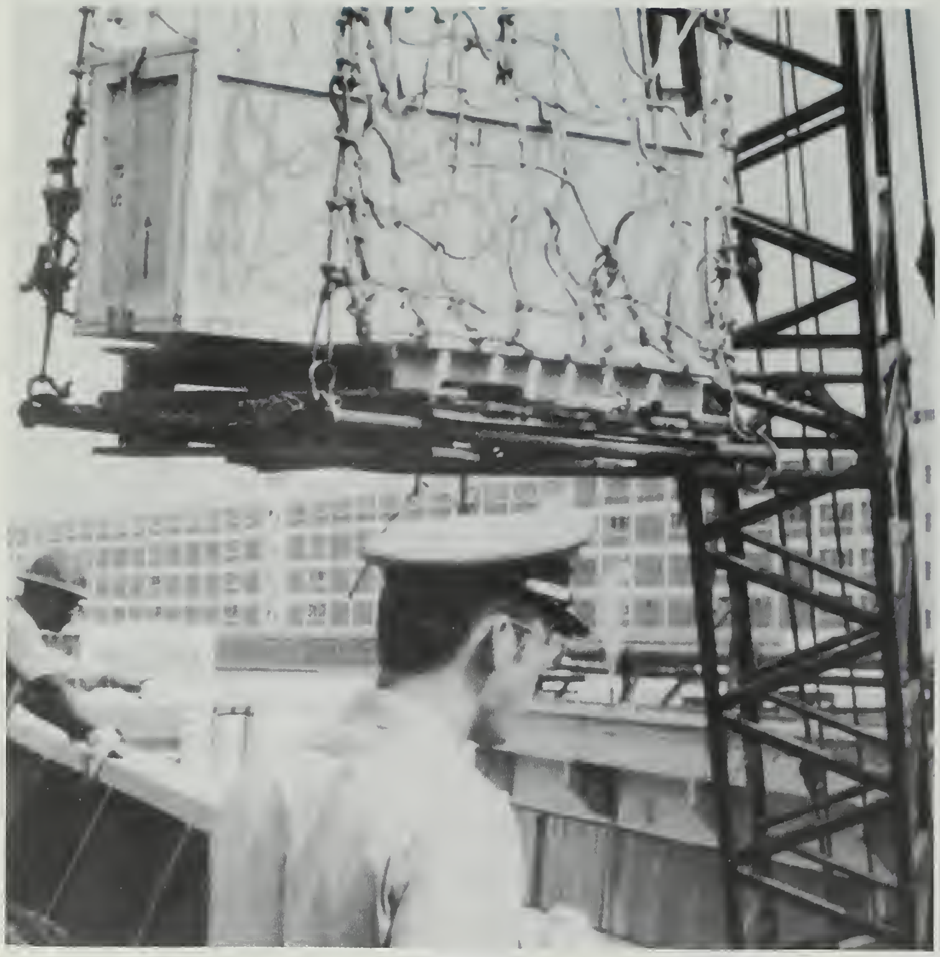


What's so unusual about a Navy ship carrying non-Navy cargo? Nothing, unless that cargo happens to be the most spectacular archeological discovery of the 20th century.

Fifty-five pieces of treasure, some of the most beautiful and fabled hoard found in the tomb of the boy-king Tutankhamen (c. 1343-1325 B. C.), were transported by USS *Milwaukee* (AOR 2) from Alexandria, Egypt, to Naples, Italy, where they were transferred to USS *Sylvania* (AFS 2) for delivery to Norfolk, Va.

The Egyptian Government made an unprecedented loan of the treasures to the U. S. for a traveling exhibition that will be seen in Washington, Chicago, New Orleans, Los Angeles, Seattle and New York City over the next 30 months. The exhibit opened in November in Washington, where it will remain until mid-March.

Very little is known of Tutank-

Left: Crate containing part of the Tutankhamen treasure is unloaded from USS Sylvania *(AFS 2) at Norfolk.*

Years to go to Sea

hamen's life and reign, a period of internal upheaval, unrest and demoralization among the Egyptians. He ascended the throne when he was about nine but died when he was only 18.

His own tomb was unfinished at the time of his death and he was buried in one prepared for Ay, his chief vizier. The whereabouts of Tutankhamen's tomb remained a mystery for centuries until archeologists found it intact and nearly undisturbed although ransacking robbers had virtually destroyed countless tombs through the centuries.

Included in the U. S. exhibition is the gold mask of Tutankhamen, inlaid with carnelian, lapis lazuli, colored glass and quartz; the wooden gilt statuette of the Goddess Selket; the gilded figure of Tutankhamen harpooning; and a small gold shrine of detailed craftmanship. Also included are examples of funerary jewelry and furniture. ⚓

Below: East wall of burial chamber.
Right: Tutankhamen's mask.

She Took Only Minutes To Find Her Element

Above: Cheryl watches her students navigate Subic Bay yacht basin.
Left: She helps student rig the rudder.

If interest in sailing has picked up recently at the U. S. Naval Base, Subic Bay, R. P., it may just have something to do with the new sailing instructor down at the yacht club.

Cheryl Von Gogh is a blonde, blue-eyed sailing enthusiast, and the wife of a Navy first class mineman. She is also one of many Navy dependents who have become actively involved in Navy community life, and is fully enjoying herself in the process.

For one who had never sailed until she arrived in Subic, Cheryl has come a long way. Of course, it took a little husbandly prodding by Bob Von Gogh to begin her nautical career. In fact, he signed her up for lessons behind her back.

"He didn't tell me until two days before the course began," Cheryl recalled. "But after I got started, I really liked it. Sailing is great fun."

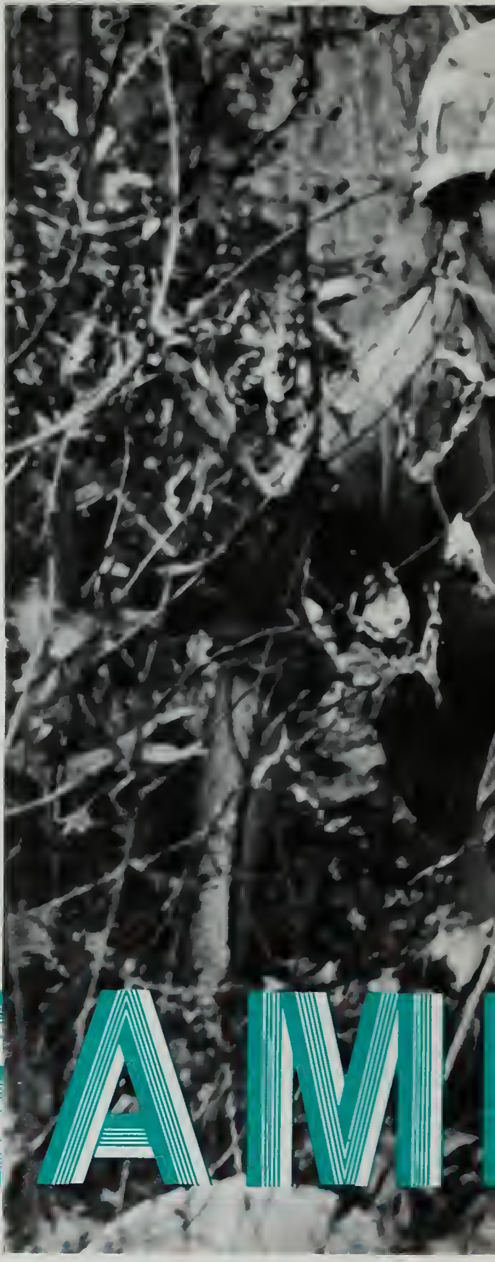
Well, one thing led to another. Cheryl's instructor needed an assistant, and was obviously impressed with the cut of his student's jib. She began assisting with rigging on Saturdays, and lectures on Thursdays and the next thing she knew she had earned her own Red Cross instructor certification card, and was launching novitiates into the exciting world of sailing.

In her new capacity, Cheryl has assumed numerous responsibilities. Classes often are large—20 or more—and instruction includes man overboard drills, rigging, the theory of sailing, how to handle a capsized vessel and, of course, student sailing in the yacht club's *Lido* 14s.

An old salt by now, Cheryl speaks of her new calling with a good deal of pride and authority. "The whole idea of the (nine-week) course is to teach people how to handle the boat properly and safely," Cheryl said.

"Anybody can get out there and sail. They can also do a lot of things wrong. Like jibing—that's when the stern passes through the wind and the boom snaps from one side to the other. If the student isn't alert or doesn't know what he's doing, he can get hit on the head, knocked overboard or the boat could capsize."

Are there any questions out there? If so, you'll have to get in line. ⚓



DAYDREAM

False Wounds Add Realism in Deadly Game

BY LCPL N. LaLUNTAS

"OK, move it out," shouts a Marine gunnery sergeant; a platoon of Navy men hustles into the thicket.

"Stay on line and spread it out," barks the instructor. "If this was the real thing and you were bunched up, half of you would be dead. All it takes is one grenade . . ."

The wistful fantasy of a seasoned Marine "gunny"? No, it's just training as usual at the Fleet Marine Force Atlantic's Field Medical Service School, Camp Lejeune, N. C. The students are Navy hospital corpsmen who may be called upon to serve with Marines.

"What are you going to do to control that hemorrhage, Doc?" asks the field operations chief. "This arm splint

NG IS OUT

is good and tight, but don't leave so much of the hand showing," advises the medical instructor. "If the man must walk any distance, it would work its way loose."

In field exercises, under simulated battle conditions, there may be as many as 50 "casualties" in an area of about 1,000 square feet.

"I'd hate to be in a war situation with this many casualties so close together," remarked one student.

The mass casualty exercise starts with a simulated amphibious landing which meets heavy resistance. About 45 corpsmen are designated "casualties" and are sent into the field with fake wounds made out of rubber. Each wound is considered serious, some more so than others and needing more immediate attention. Twenty-five students, playing the role of company corpsmen, search the area engulfed by smoke. The students must try to remain hidden from the enemy, using any trick of concealment they can. A radio-controlled machinegun, firing blanks, is set off every time a corpsman is sighted.

After an hour of this kind of exercise, the students, tired and sweaty, trudge to a clearing for a C-ration break.

After the too-short lunch period, the men are rounded up for the "search and destroy" briefing. Their mission: sweep the woods to find and destroy a guerrilla base camp. The military tactics instructor maps out the area.

In full combat gear, the sailors fall out onto the road. "Keep moving into the woods," commands the instructor, "and keep your minds on the assault. Daydreaming could mean death."

One man charges ahead of the rest as they comb the thickets. "Hey, John Wayne, you wanna get with the rest of us? You're not gonna win it all by yourself," yells a Marine instructor.

A shot rings out and the man falls. As a company corpsman rushes to his side, another radios for a medevac.

The corpsman quickly wraps the fallen man's head, offering reassurance as he tends the wound. "Hang in there, buddy. You're gonna make it. Somehow I just know," he grins.

→

Hospitalman R. L. O'Keefe pushes on through water and mud during training mission.

Navy corpsmen spend six days and nights in the field applying first aid and military tactics they have studied for five weeks in the classrooms.

"Our mission," says Lieutenant (junior grade) David D. Brooks, training officer, "is to train hospital corpsmen and dental technicians to serve Fleet Marine forces. That means a complete understanding of Marine Corps functions, organization and tactics, in addition to medical skills." This is accomplished through the field exercises.

"We throw so much at them in so short a time, that it is difficult to comprehend without the field exercises," says Marine Gunnery Sergeant Calvin E. Decker, military training NCO. "Some of them feel we're trying to make Marines out of them." No, he stresses, "but they have got to see how it works before they can do their job."

"Most of them have never lived or worked with Marines," continued Decker. "Our training must prepare them to protect themselves and serve their units."

"Ideally, the corpsman will take his place in a Marine formation and never falter."

High ideals and compassion are not uncommon in the ranks of corpsmen who have served with Marines in combat. For instance, Marines at the Field Medical Service School still talk about Hospital Corpsman 2nd Class Chris M. Pyle. Pyle received orders to Vietnam after completing field training. In a letter to his mother drafted January 1969, he wrote the following words:

"Some day I will see before me a wounded Marine. I will think all kinds of thoughts, but my training has prepared me just for this moment. I doubt that I will be a hero, but to that Marine, I will be God. I am hoping no one will die while I'm helping him; if so, some of myself will die with him. No matter who it is, if he's wounded in the middle of a rice paddy, you can bet your bottom dollar that whatever God gave me for power, I will try until my life is taken to help save him and any other."

"Doc" Pyle was killed in action May 28, 1969. ⚓

Below: Fallen tree conceals Hospital Corpsman Third Class D. L. Jackson as he bandages a leg wound.

Bottom: "Casualties" head to rear, seeking medical aid.

Rights & Benefits

Buying your mobile home

JO2 DAN WHEELER

It's no secret. Housing prices have risen so rapidly during the past 10 years that many Navy members (and their civilian friends) have been priced out of the home-buying market. For some, an alternative to buying traditional housing or a condominium is purchasing a mobile home. That's when expert advice is sought from an experienced friend—the Veterans Administration.

Though VA has been guaranteeing mobile home loans for only six years, they have been in the business of helping veterans and service members buy all types of dwellings for more than 30 years. During that period, VA has "cosigned" more than nine million mortgages totaling $120 billion.

When VA began guaranteeing loans for mobile homes and lots, the limit was 30 per cent of the purchase price. The Veterans Housing Amendments Act of 1976 increased the guarantee to 50 per cent, or $12,500 on single-width units and $20,000 on double-width units, whichever is less.

A "guarantee" is simply that amount for which VA cosigns on your mortgage. If, for example, VA guaranteed $12,500 of a $30,000 mortgage on a single-width mobile home, and the borrower later defaulted causing the lender to foreclose, Uncle Sam would have to pay the guaranteed portion of the loan and subsequently bill the borrower for VA's net loss after the home was resold. (It's important to note here that VA usually assumes the entire note and resells the home itself. Occasionally a purchaser can get a bargain by checking VA listings first when searching for a home.)

The readily apparent benefit of the guaranty program is that it meets the requirement for investment protection demanded by commercial lending institutions through substantial down payments. Because VA-guaranteed loans require no down payments (because VA affords the lender protection), it's easier for young couples and those who have been unable to save enough for a conventional mortgage loan to purchase their first home.

Other advantages include the fact that the VA:

- Inspects homes on the market and requires sellers to meet minimum quality standards, thereby ensuring that VA purchasers get value for their home-buying dollars.
- Is ready to work with a purchaser who finds himself in temporary financial straits after purchasing a home. Often the administration acts as a liaison between the service member and the lender to prevent foreclosure and effect a mutually acceptable agreement temporarily lessening payments, if necessary.
- Polices builders to ensure they are strictly following building codes.
- Continually works with lenders, encouraging them to lend to service members and vets under the guaranty program.
- Works closely with potential purchasers to ensure they are aware of hidden costs in home ownership and that they are not buying a home which they may outgrow.

If the mobile home in your future was constructed after June 15, 1976, it must meet the new Department of Housing and Urban Development standards. These specify that the unit must be suitable for single-family occupancy on land (as opposed to a houseboat, for instance) and it must have facilities for eating, cooking, sleeping and sanitation.

A VA-guaranteed mobile home loan may be used to purchase either:

- A mobile home unit, double or single width. Doubles must be at least 20 feet wide with 700 square feet of floor space; singles, 10 feet wide with 400 square feet of floor space.
- A land lot for an already owned mobile home. According to VA officials, this type of loan is difficult to get approved under the guaranty program because commercial lenders are reluctant to lend money in such a small amount if they have to abide by VA stipulations setting maximum interest and term of payments.
- A mobile home unit and a lot for installation.
- For preparation of a lot on which to install a mobile home.

Anyone who has served on active

duty since Sept. 16, 1940 and separated under other than dishonorable conditions (or is still on active duty) is eligible for a VA-guaranteed loan on any type of family dwelling if he or she meets financial requirements set by VA and the lender. Only those individuals, however, who have full entitlement for the guaranty program are eligible. In other words, if a vet or service member has previously used a VA guarantee, that loan must have been paid in full or assumed by another VA purchaser before a second guaranty loan can be made.

Additionally, unremarried spouses of members who served on or after Sept. 16, 1940 are eligible if the member died as a result of a service-connected disability. Spouses of personnel officially listed as MIA or POW for at least 90 days are also eligible. (This entitlement ends when notice is given that the service member is no longer MIA or a POW.)

Currently, there are 30 million veterans, not including active duty members, living in the United States. Many of them are eligible for the VA mobile home guaranty program. If you are one, or are an interested active duty member, contact the nearest VA office or commercial lending institution for more information and applications. ⚓

Grains of Salt

Dorie Miller -He Displayed Selfless Courage

Blacks have made a number of noteworthy contributions to the U. S. Navy in its 201-year history. Few, however, have given as much as Dorie Miller, an enlisted hero during the attack on Pearl Harbor. This is his story.

Born in Waco, Tex., on Oct. 12, 1919, Doris (Dorie) Miller entered the Navy as a Mess Attendant 3rd Class at Dallas on Sept. 16, 1939. In his brief career he advanced to the rate of Ship's Cook 3rd Class.

Miller conducted himself heroically in the battleship USS *West Virginia* (BB 48) during the Japanese attack on Pearl Harbor. Historians have recorded that he was collecting laundry in the battleship that Sunday morning of December 7 when general quarters sounded as the raiders struck Hawaii.

Dorie raced to his GQ station—the antiaircraft battery magazine amidships—only to find that torpedo damage had already taken its toll. He hurried topside where he braved the bombing, strafing and flaming decks to help the ship's mortally wounded commanding officer to a safer place. Miller then manned a machine gun and opened fire on the attackers, relating later that he believed he got one before being ordered to leave the bridge after some 15 minutes of continuous firing.

For his selfless courage in trying to save the commanding officer and his extraordinary display of heroism in the face of death, the 22-year-old sailor was awarded the Navy Cross.

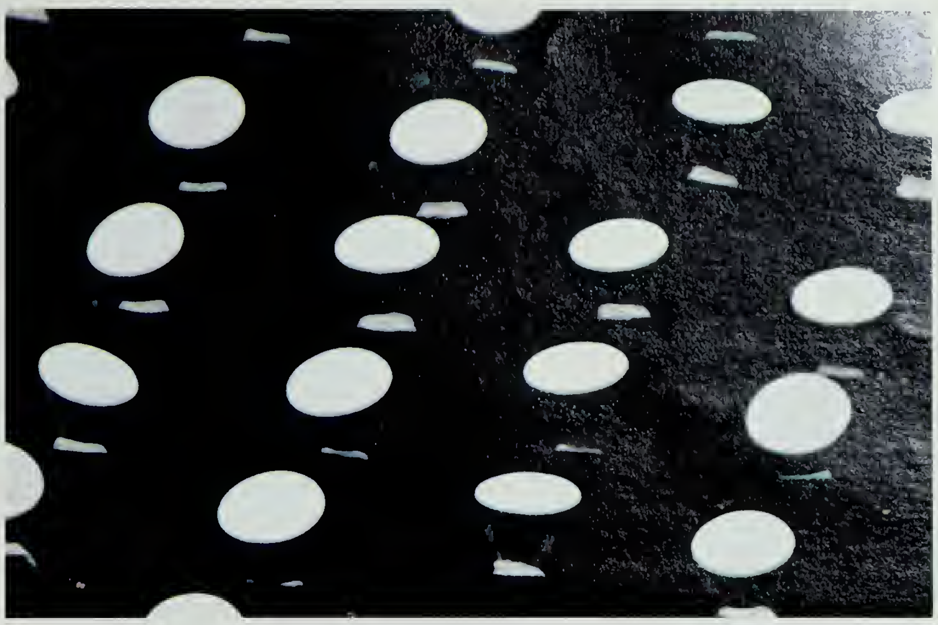
Following his tour aboard *West Virginia,* Miller spent 17 months in the cruiser USS *Indianapolis* (CA 35). He then spent a brief time at Puget Sound Naval Shipyard in Bremerton, Wash., before joining the crew of a newly constructed escort aircraft carrier USS *Liscombe Bay* (CVE 56) in the spring of 1943.

Shortly afterward, Miller was promoted to third class. Then, barely more than two months later, having completed drill and exercise periods off the California coast, Dorie and the new flattop departed San Diego on October 21. Their destination was Hawaii and subsequently the invasion of the Gilbert Islands.

The battle for Tarawa began November 20, ending in U. S. victory some 76 hours later. The young Texan sailor had had his second taste of battle and came out unscathed.

The following day, just after reveille—on her 99th day as a Navy ship—*Liscombe Bay* became the target of a Japanese submarine torpedo. In 23 minutes she sank, carrying the task force admiral, commanding officer and 644 crewmen with her. Petty Officer Dorie Miller was not among the 242 survivors. ⚓

THEY CAME EARLY



TO WATCH NAVY...

BEAT ARMY!

BY JO1 G. ATCHISON AND PH1 T. MITCHELL

There was a look of horror on the face of the visiting Army officer. He found his Naval Academy guest quarters surrounded by sledgehammer-wielding midshipmen. The 4,500-man brigade shouted to him that they intended demolishing his brand-new car.

Below: Exuberant midshipmen carry Academy Superintendent RADM Kinnaird McKee during pre-game pep rally. Right: Applying Tecumseh's annual coat of war paint.

Stunned, he watched as the midshipmen began hammering away. His fear almost turned to panic when, after the horde reduced the car to rubble, they turned on the house. The grim-faced Brigade Commander marched up the steps and handed the quaking officer a piece of paper . . . a check for more than $4,000—collected at a dollar apiece from the brigade—and enough to replace the Army officer's "new" car with a better model.

What's going on?

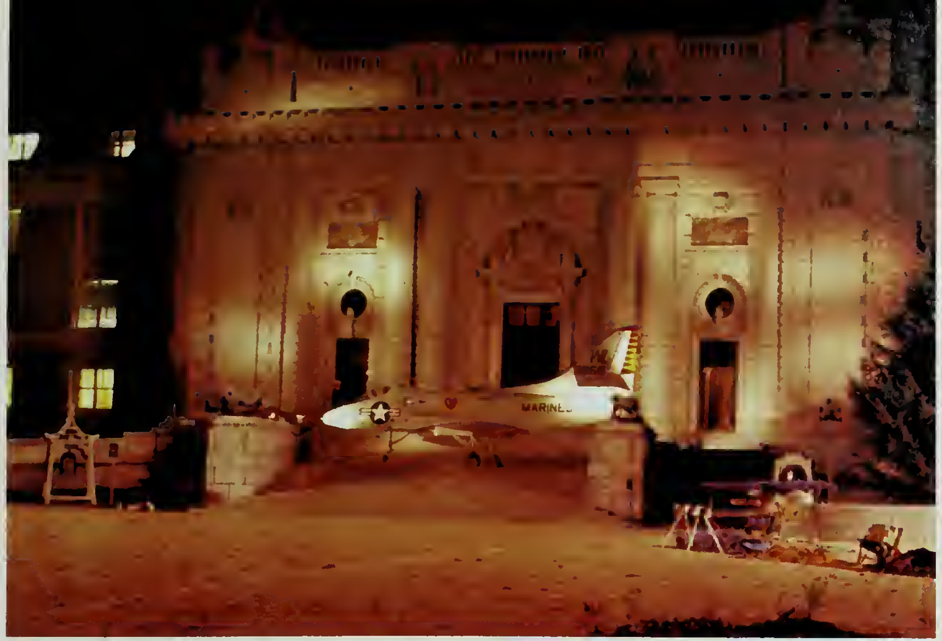
That incident, considered by many Naval Academy alumni as the grandest prank of all, happened in 1969—at the start of the week-long series of events serving as prelude to the annual Army-Navy football game.

Each year, during one madcap week in November, the Naval Academy takes on a decidedly different face. The subdued atmosphere of a center of learning and naval tradition is shattered by the raucous pranks and pratfalls of thousands of midshipmen gearing up for the big game. The crisply manicured lawns, stately buildings and dignified faculty homes suddenly blossom with posters and floats, all bearing the same basic message:

"BEEEAATT AAARRMMYY!!!"

The roar of a thousand voices shatters the midnight silence, bounces off the buildings and echoes through the yard. The massive doors of Bancroft Hall crash open and wave after wave of midshipmen come pouring down the steps, across Tecumseh Court and spread out—so it was in November 1976.

The object of the midshipmen's most recent boisterous assault was the superintendent's home. After cheers, songs and skits on Rear Admiral Kinnaird R. McKee's front lawn, the superintendent (as tradition said he would) granted "over-the-wall" or liberty in town for the midshipmen. Away they went—streaming through the gates and into the nearby community.



Left: Guarding Bancroft Hall at three in the morning is the A-4 Skyhawk midshipmen moved from its permanent home on Thompson Field. Below: Navy fans silhouetted by massive bonfire.

BEAT ARMY!

But even as this mass of midshipmen began a night on the town, a small, secretive group had stayed behind to launch yet another mission in the spirit of Army-Navy Week. For 51 weeks a year, two Navy aircraft—an A-4D *Skyhawk* and an F-4A *Phantom*—sit heavily chained and bolted to concrete pads adjacent to Thompson Field. But in the week before the game, they tend to change settings—showing up in the darndest places.

The skulking group sifted, one by one, from the shadows and crept across the road. Various tools and lengths of rope appeared from beneath sweatshirts. The great plane-kidnap was on.

Next morning, there sat the *Skyhawk* on the steps of Bancroft Hall. Midshipmen on their way to class passed around the plane as if nothing were amiss. One, laden with books, paused to examine his classmates' work. "Not bad," he said. "They only had about a two or three-inch clearance to get this thing up here. It'll probably take a week to get it down."

Between classes the courtyards filled with midshipmen's black uniforms and white covers. Up close, one could observe subtle—and not so subtle—alterations in their uniforms. One midshipman strode purposefully toward class, a purple bow tie adorning his otherwise immaculate uniform. "Beat Army," it said. Such variations on the usually stringent dress code are not uncommon during Army-Navy Week.

Another midshipman, wearing his uniform but sporting the hat style Napoleon made famous, paused and addressed an instructor: "Good morning, professor," he said as he doffed his "cover" and executed a sweeping bow.

The professor shook his head, muttering under his breath as he continued up the steps of Bancroft Hall. →

Pranks, like a cleverly placed smoke bomb in the Army ranks, divided the fans' attention between the playing field and the stands.

Below: Just before the game the brigade of midshipmen marched onto field under cadets' watchful eyes.

Inside Bancroft Hall, people hurried to put the final touches on their "Army Projects"—a euphemism for the incredibly intricate displays and floats each company of midshipmen builds and exhibits at the Academy and at the game.

"Our 'engineers' started in September designing and laying out the electrical circuits and motor parts for this little baby," said a midshipman as he patted what resembled a giant bucket similar to the container in which Southern-fried chicken is carried home. But, according to the legend on the six-foot-tall bucket, it actually contained "Annapolis fried mule." What appeared to be a full-sized back end and hooves of a mule protruded, twitching and turning, from the top of the bucket. "We began 'appropriating' the necessary materials for it a couple of months ago," the midshipman said as he picked up his scattered tools.

But the reward was not just in the building of the projects. One afternoon that week, with all the pomp and ceremony befitting any serious occasion, the "Army Projects" were judged. "Not scathing enough in its attack against Army," said one judge of a project. "The rockets on this 'Attack-Army airplane' failed to fire—definitely not acceptable," said another.

A winner was picked after the judges compared notes to the tune of boisterous lobbying by project builders. A two-man tank, that not only moved about on its own power (accompanied by appropriate tank-like sound effects) but also had a working cannon, won by acclamation. Anything that could launch an orange across Tecumseh Court and strike a target bearing a mule's face in the bull's eye—or actually mule's nose—had to be a winner.

As the days passed, the fervor grew and tales of pranks increased. Midshipmen relished recounting some of the classic stunts—like the demolished car story—that had been pulled off over the years. The one about the Army exchange officer at the Academy who was locked in his room with a mule that had been fed a laxative was a popular tale.

But while pranks may come in endless variety, some things remain constant—like the annual pep rally bash and bonfire. Days before the big event, the Academy maintenance crew was busy laying hands on every available scrap of wood. A steady stream of stake trucks and vans backed up to the center of Thompson Field and dumped their booty. Old wooden pallets and broken chairs were flung on a rapidly growing pile. What appeared to be a batch of tomato plant stakes—perhaps taken from an unsuspecting faculty member's garden—joined the 20-foot-high stack.

The sights and sounds included cheerleaders, drum and bugle corps and groups of midshipmen—with friends and family.

The night of the pep rally and bonfire, an expectant crowd gathered around the mammoth woodpile to watch the football team set it off.

"What do you mean you don't have any matches?" The players, looking sheepishly from one to the other, turned their pockets inside out. But, of course! Since none smoked, how could they carry matches?

After a moment's uneasiness, a local newspaper photographer came forward and graciously offered the use of his cigarette lighter. The football players set to work.

Quickly then, the entire week's work was engulfed. First Thompson Field glowed. Then, as the flames

(Continued on page 47)

BEAT ARMY!

Keeping America Beautiful

YN3 Dickie Erickson stops to talk with a working party planting trees along the main street of Norfolk Naval Station's Destroyer and Submarine Piers. Freshly painted blue and gold trash cans are another of the base's beautification projects.

A Winning Recipe in Norfolk

STORY BY JO2 GARY GRADY
PHOTOS BY PHC MILT PUTMAN

RECIPE

Mix one part transient personnel with one part Correctional Center confinees and add ingredients to already prepared portions of fresh air and hard work.

Add a liberal sprinkling of imagination, enthusiasm and planning.

Stir briskly for two years and top with volunteer work by assigned base personnel and their families.

Serve with generous portions of increased base pride.

The result of the above original recipe has been a well-groomed new look for the U. S. Naval Station, Norfolk. It has also been an award-winning dish; NavSta Norfolk was recently named winner in the government agency category of the national Keep America Beautiful competition.

"When I came here as commanding officer," said Captain Paul L. Merwin, "we made changes in the organization and got people involved in a cleanup program. Base clean-up was given high priority."

The two-year project involved more than just picking up surface trash. Abandoned vehicles were towed to salvage yards, older barracks were modernized, streets and sidewalks were widened and resurfaced, gutters were cleaned, drains unstopped, and trees and shrubbery were planted and trimmed. Wives clubs painted fire hydrants in a Bicentennial motif and planted flower gardens alongside well-traveled streets. In no time, these changes gave the base a new look.

Still, one major eyesore remained—the "strip" on Hampton Boulevard right outside the Naval Station's main gate. This collection of aging buildings, locker clubs, bars and pawn shops—not government property at the time—gave visitors a negative impression before they even reached the base.

Either fate or coincidence, however, eliminated the strip from the list of deterrents to beautification. When a runway extension at the adjoining Naval Air Station became necessary, the large tract of land purchased by the Navy included this area bordering both sides of Hampton Boulevard for several blocks. Dilapidated structures were demolished—those in good repair were refurbished and converted for Navy use. "Honky-tonk Boulevard" lost its roaring twenties look; grass and trees were planted and the avenue landscaped, creating a park-like atmosphere.

Only a few individuals permanently attached to the Naval Station were directly involved in the on-going program. The executive officer, Commander Jimmy Pappas, accomplished much of the planning. The station's first lieutenant, Master Chief Master at Arms Hugh G. Wade, put the plans into action with the assistance of Chief Constructionman Donald W. Oswald. Oswald was subsequently awarded the Navy Achievement Medal for his efforts.

Everyone on the base however has become involved in keeping the new look looking new. It's a known fact that a clean place is likely to stay clean. The average person feels little remorse or hesitation when adding more debris to an already littered area, but most think twice before tossing the first soft drink can or candy wrapper on a manicured lawn.

While some incurable litterers still seem to reside at Naval Station, Norfolk, littering and vandalism have been greatly reduced since the beautification program began. This is partly due, of course, to pride; the upgrading of security and the subsequent strict enforcement of anti-litter regs also have played a part. Persons caught littering on base are reported, even ticketed. Civilians are ordered to the local Federal Magistrate's Court; military offenders are referred to their commanding officers for apropriate action.

Although the station's clean-up program began independent of any nationally organized endeavor, it has measured up admirably in national competition.

"We saw an ad for the Keep America Beautiful contest," CAPT Merwin said, "and decided to enter. Within two weeks, we had put together a booklet of photos and background material and sent it in for consideration. Frankly, I didn't expect to hear anything more."

(Keep America Beautiful, Inc., is a nonprofit society founded in 1953 to combat litter and improve solid waste disposal. It actively supports more than 100 conservation programs and encourages the cleaning up and beautification of industrial areas under its Clean Community Systems project.)

Much to Captain Merwin's surprise, a telegram came a few months later telling him the Naval Station had been awarded first place in the Government Agency Category of the annual Keep America Beautiful Awards Program. The station topped competition involving other military installations, state, local, and federal organizations.

CAPT Merwin stated that the award was important, but more valuable was its contribution to "safety, morale, good order and discipline."

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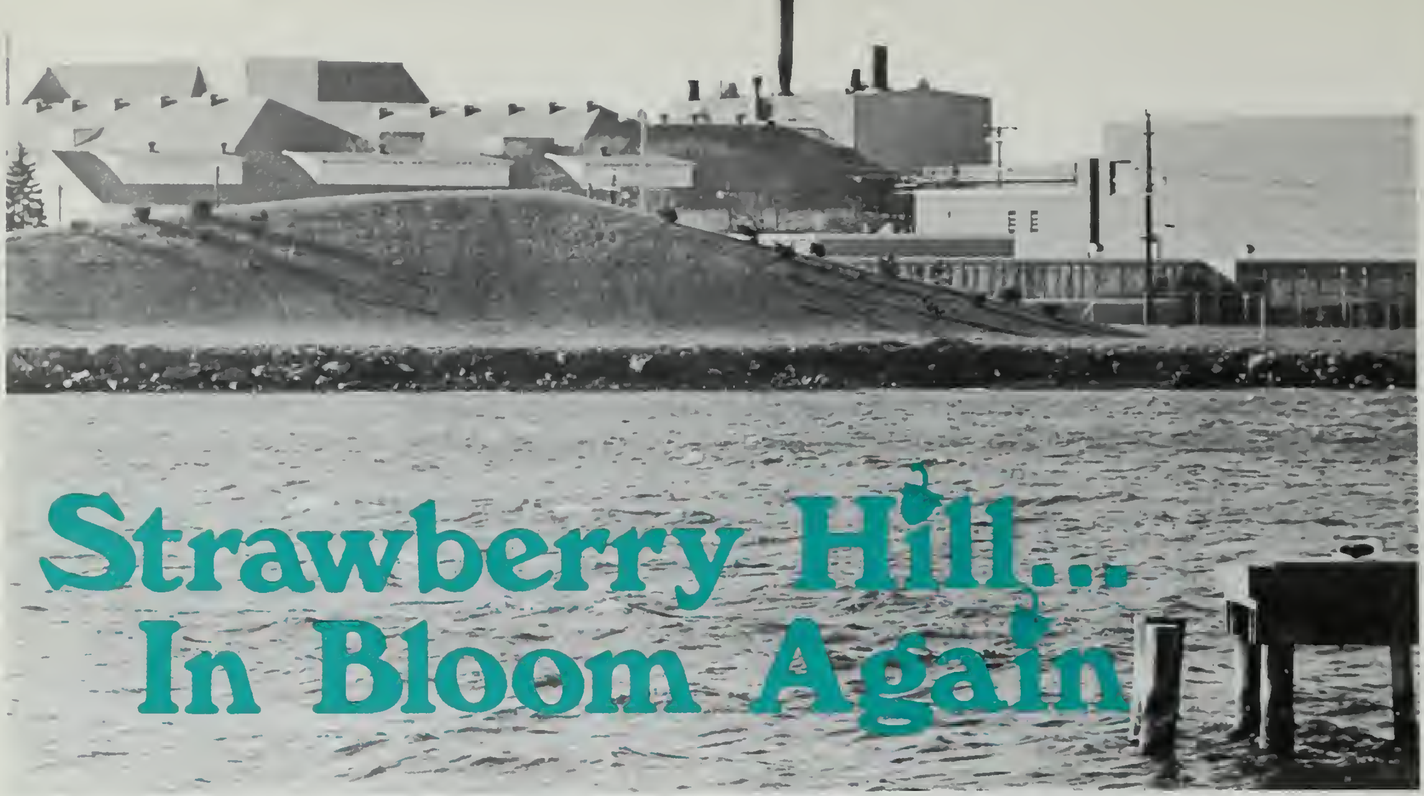


Strawberry Hill... In Bloom Again

BY JO2 DAVE HOCH

Strawberry Hill—plowed away decades ago, yet never removed from Coast and Geodetic Charts—has returned to a more beautiful Newport, R.I., after a 30-year absence. Other landmarks, more accurately called "eyesores," have been banished as a result of the Naval Education and Training Center's (NETC) beautification program.

Not limited to NETC, the two-year-old program encompasses the entire Newport naval community including naval housing areas.

A perfect example of the spirit motivating the program, Strawberry Hill's restoration is indicative of cost-saving measures taken in times of economic belt-tightening. The hill, a ledge outcrop on the northern end of Coasters Harbor Island, was leveled in 1942 to make room for the Navy Firefighting School. Its core, however, was used as fill for the road bordering the shore along Narragansett Bay. Now, three decades later, the hill again stands—the solution to an expensive problem.

> **'Before the beautification program began, each separate command had responsibility for its own turf.'**

The problem was created in 1973 when the firefighting school was demolished and it was discovered that it would cost $26,300 to haul away the ensuing rubble. One enterprising architect struck on the idea of using the rubble to rebuild the once flattened Strawberry Hill. Debris was stacked into contoured hills and covered with earth fill. The mounds were then graded and seeded to allow 200 trees and shrubs to be planted. Today the hill is a part of a newly built recreation area on the spot where once a smoke-spewing ecological disaster stood.

This type of beautification is commonplace at the Newport naval complex today. "Before the beautification program began," said Captain Howard Kay, NETC's commanding officer, "each separate command had responsibility for its own turf. There was no standard painting policy, no standard sign format, and no genuine attempt was made to create a harmonious environment."

Then, in 1973, as a result of the Shore Establishment

New sentry booths at all gates to NETC have greatly improved first impressions.

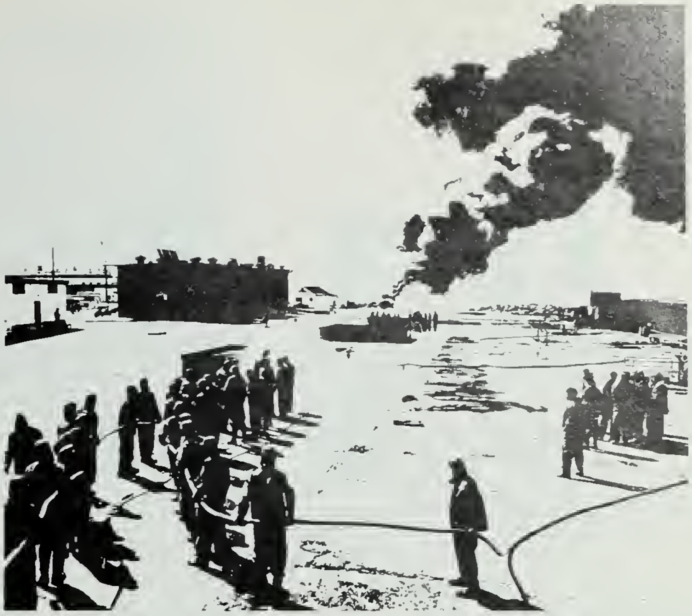
Strawberry Hill today, left, at the site of the old Firefighting School on Coasters Harbor Island.

Realignment action, boundaries separating individual commands disappeared. "At that time, a plan was formulated to create aesthetically pleasing surroundings through a systematic cleanup and renovation of the base. Strawberry Hill is one result," the captain said.

Since the program's inception, 58 old buildings have been demolished and the land on which they sat was landscaped; remaining buildings have been repainted in pastels. Signs on base and off have been adapted to a uniform color scheme of blue and gold; unnecessary signs have been removed.

Additionally, three new recreation areas have been constructed and named for early ships figuring prominently in Narragansett Bay's history. BEQs have been renamed in honor of Rhode Island Navy Medal of Honor recipients. All base streets have been renamed in honor of various Newport naval heroes and historical personages. Finally, area directories have been posted in convenient locations around the complex.

Seventy thousand square yards of streets and parking lots have been paved, bus shelters renovated, new guard shacks at the main gates built, dead and dying trees have been removed and shrubs and floral plots planted in their places. An established litter patrol polices the grounds and shoreline and ensures that trash is placed in the new and attractive waste containers at convenient locations.



Before and after scenes of the same area show the Navy Firefighting School in its heyday, and Strawberry Hill as it looks today.

A constant lookout for possible problem areas is maintained by an NETC public works inspector, who routinely conducts three inspections each week. Inspection findings are reported directly to the commander for action when appropriate.

Major construction played a large part in the renovation process and has contributed to the new look with the addition of a third building at the Naval War College, a new commissary store and expanded parking facilities. The rest of the beautification program (with the exception of demolition) was accomplished through "self-help" projects or by private groups within the housing area donating their time and efforts.

"Because Newport is a primary site for officer training and education, it is our responsibility to make it as attractive as possible," CAPT Kay said. "Many of the international officers who train here get their first impressions of the U. S. Navy from what they see here. We'd like to think everyone—staff and students, military and civilian—will want to make this center and the Newport complex one in which he or she can take real pride." ⚓

They Build a Model Fleet

BY LT JOHN F. DONOVAN

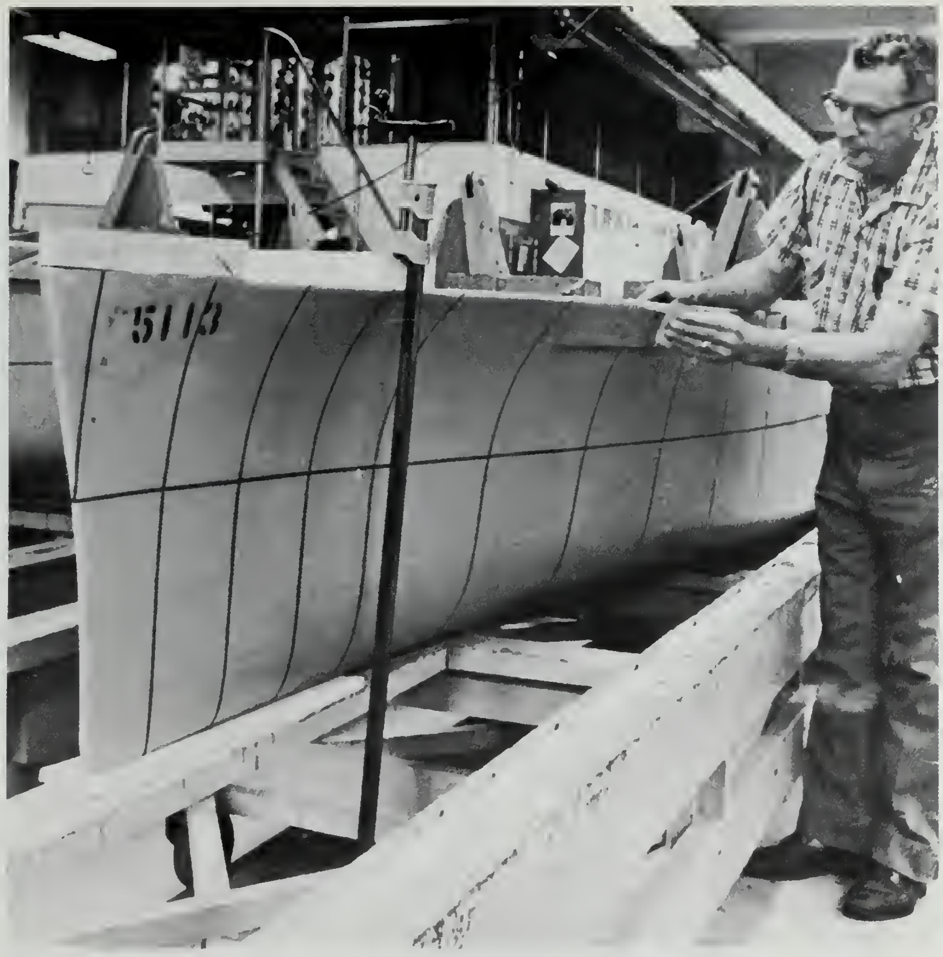
The Navy pays people just to build model ships all day.

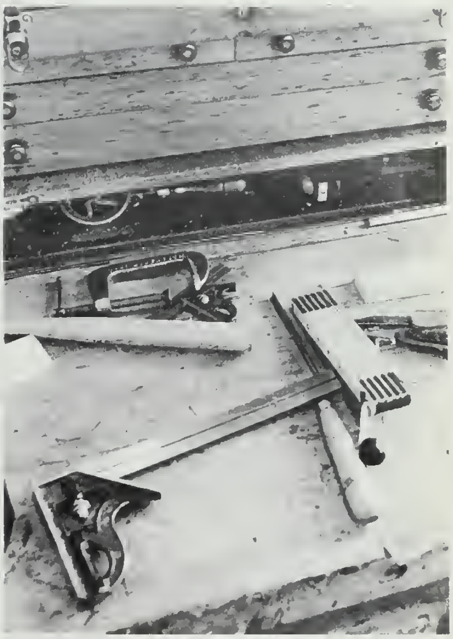
Sort of like gluing together the $2.89 model kits from hobby shops, except the Navy models run up to $30,000—and they have to be accurate.

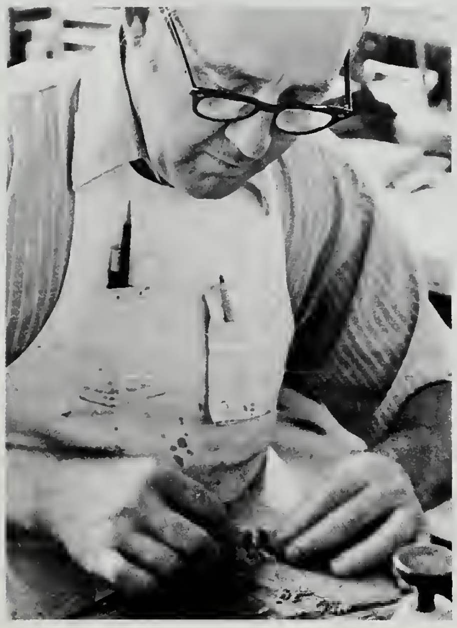
The modelmaking takes place at the David W. Taylor Naval Ship Research and Development Center, Carderock, Md., a quiet retreat near the Potomac, 12 miles northwest of the Capitol, in Washington, D. C.

Fifteen modelmakers construct wood and fiber glass models from 10 to 32 feet long and up to five feet wide. Their work is in support of research, development, test and evaluation missions which help the Navy zero in on the best vessels and related equipment the defense dollar can buy.

Carderock is where tomorrow's ships are proved today. The Navy tries to go about it in a practical, economical and logical way. It makes sense to build a model of a ship and subject it to simulated sea and combat environments before building the ship itself. Models help engineers observe performance, determine design modifica-







tions and ultimately build a better ship. It's better than estimating utility and performance on paper, or constructing the real thing and then spending millions to make alterations.

The same modelmaking technique is used at Carderock in designing submarines, aircraft, missiles, propellers, screws and rudders.

Carderock models are tested in basins which can duplicate every sea condition. The longest basin, 3,078 feet, is so long the water surface actually bends to a measurable degree with the earth's curvature.

Tests occur in five major basins: deep water, shallow water and turning, high-speed, seakeeping, and rotating arm. The first three are in a cavernous building nearly a kilometer long, capped by a concrete barrel roof. Air currents that could interfere with delicate testing are minimized and the absence of natural light impedes algae growth.

The seakeeping and rotating arm basins are in the Harold E. Saunders Maneuvering and Seakeeping Facilities building which covers nearly five acres. All basins have electric towing carriages which are laid on girder structures embedded in concrete and mounted on bedrock.

The new high-speed carriage under construction will reach speeds of 55 feet per second, equating to more than 100 knots in ship model testing.

The model-testing approach is tried and true. Benjamin Franklin is thought to be the creator of the first model basin. That consisted of a narrow trough in which a board was pulled over water by a string extending over the trough's far end, around a pulley and attached to a weight.

In 1896, Congress provided the Navy $7,500, "for making plans. . . . Toward the construction of a model tank" at the Washington Navy Yard. David Watson Taylor, for whom the Carderock facility is named, supervised construction of the first basin. He was the Secretary of the Navy Board of Constructors and had helped design the country's first three battleships. Taylor eventually retired as rear admiral, but not before acquiring the unofficial title of dean of the Navy's hydromechanics, structural mechanics and aerodynamics pursuits. Taylor was at the Carderock opening in 1940; he died shortly afterward.

Taylor favored wood models and these have been the main type down to the present. Later, wax models came into use but have now been discarded. Fiber glass models using wood molds are the newest concept.

Today's modelmakers work in a modern, well-equipped shop adjacent to the long basin. They use high-powered lathes, presses, sanders, saws and other tools to shape "roughs" of the desired models. Wood models of sugar pine planks are glued (no nails) under as much as one million pounds per square inch to form the rough dimension. Craftsmen use warp-resistant mahogany for submarine models.

Enter the computer, in this case a "numerical control profiler." The profiler, which weighs in at 90 tons and cost $300,000, has a two-story gantry that moves two cutting tools past the "roughs," shaping them along three planes.

The cuts are determined according to a computer program that defines a specific drilling, milling or cutting technique. The program is based on the desired design. The result is a model that meets the most exacting specifications. Even though the whole process takes about 80 working days, the computer techniques saves many man hours.

Carderock models are hollow so en-

Many valuable engineering contributions result from modelmaking; most notable in the early days was the invention of the bulbous bow. This design reduces water resistance by placing an extension of the bow below the forward waterline.

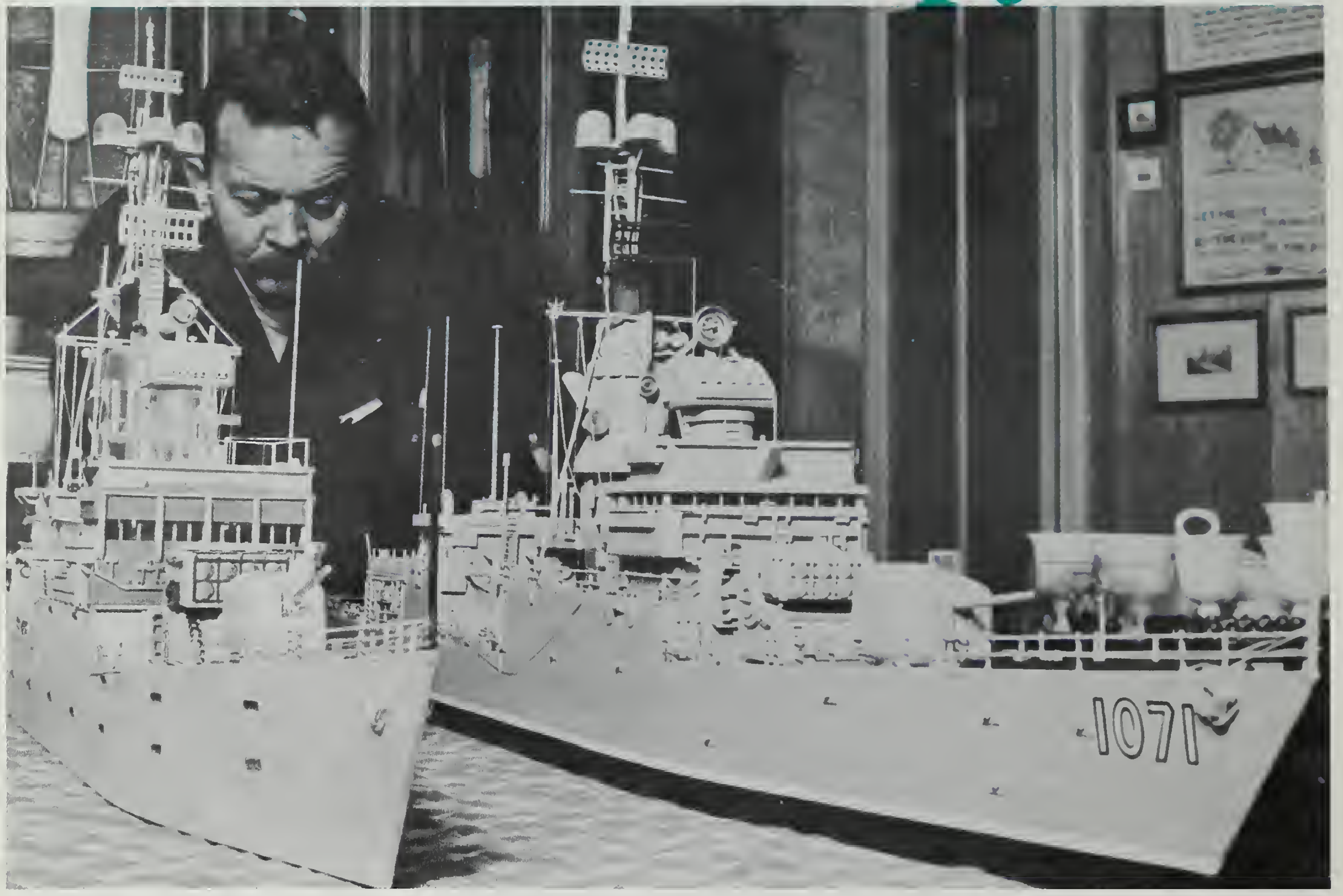
Modelmaking requires expert artisans and aspirants undergo a rigorous five-year apprenticeship with OJT. A good background in shop practices is a prerequisite and, more than that, an apprentice must have great perseverance in learning the exacting trade.

But once they have learned, these modelmakers of Carderock embark on a vocation that might well be the envy of anyone who has lovingly and painstakingly built a model of a clipper or a warship. ⚓

gineers can install scientific payloads of highly sensitive electronic and sounding gauges which measure water resistance, friction, cavitation (the hollow space which trails a vessel moving through water), and other hydrodynamics. This instrumentation yields vital data in ship planning and makes the whole model effort worthwhile.

Carderock wood and fiber glass models usually appear without their superstructure because the vessels' chief utility is to provide observation of performance in wet surface areas. A machine shop builds model superstructures of metal for testing in wind and smoke environments. Although no models are intended for display, their exact scale makes them suitable for this purpose.

Miniature Shipyard



Bill Carter compares his models of USS Badger (DE 1071) and USS Knox (DE 1052), noting the differences which can be detected because of the materials he uses (household items) and the guides he follows (photographs and drawings). Photos by LT George Gillett.

BY LT G. C. GILLETT

The lure of the sea is strong, and is reflected in many ways. Bill Carter's "shipyard" in landlocked Wichita Falls, Tex., is a good example.

Bill served six years in the Navy.

After his discharge in June 1946, he figured the Navy was a thing of the past, but somehow the years of shipboard life left an impression that suddenly emerged in an idle moment as a desire to make a model of a ship. With no particular goal in mind, he picked up a picture of an old Baltimore mail liner and set to work.

He had never worked with models before, but his six years as a boatswain's mate left him the knowledge of how things should look. Even more helpful was his almost uncanny ability to see a common, everyday item, such as a plastic blade dispenser, as a miniature component of a ship.

Several months and a lot of rummaging for odds and ends produced an amazingly realistic model of the old mail liner.

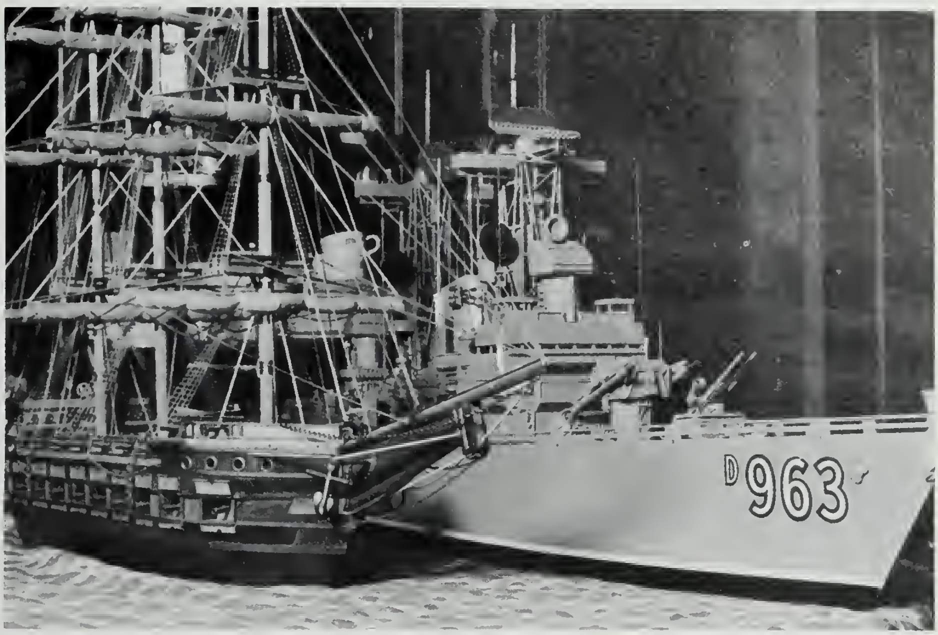
Thirty years, a lot of patience, and an unbelievable amount of odds and ends have fostered the growth of the "shipyard," as his friends have dubbed his home. By his own admission, Bill isn't sure how many models he has built, but it is somewhere around 70. Although he did not originally intend to concentrate on Navy ships, it has turned out that every one he has built has been either a Navy vessel, or one contracted to the Navy at some point, including, too, the gleaming stern wheel river steamer he completed a month ago.

Most models are styled after certain classes rather than specific ships. For example, he may point to one and say, "That's an APD; I'm not real sure which one." He concedes that his scale is not always exact, but, "They run pretty close to one foot to 100 feet —his *Intrepid* is close to eight feet long and a little hard to move around."

Intrepid, now on display in the Navy Recruiting Office in Fort Worth, was built about seven years ago, while Carter's son, Hal, was serving aboard her as a gunner's mate.

Of all the models he has built over the years, only a couple have been made for a specific reason or purpose. One of these, USS *Constitution,* was built for his wife, Helen. "She has always admired 'Old Ironsides,' so I built it for her."

It is apparent that the model is special—it occupies its own space on a shelf of antiques, apart from other ships. ⚓



The old and the new are equally at home in the "shipyard." Here USS Constitution shares the dining table with USS Spruance.

Maritime memorabilia are stacked to the ceiling in Bill Carter's "shipyard."

Bearings

Airwaves' Recruiting

If you went to high school in the Barstow, Calif., area, you would certainly know who Happy Harry and Smilin' Jack are. If (as is more than likely) you didn't go to high school in Barstow, be advised that the Happy Harry and Smilin' Jack Radio Show has an estimated 83 per cent of the kids glued to their radios.

Which may still leave some readers racing to say "Who cares?"

But consider the fact that Happy Harry is actually Navy Chief Petty Officer Harry Penny, the local Navy recruiter and that Smilin' Jack is actually Staff Sergeant Jack Campbell, local recruiter for that branch of service which flies a lot of airplanes.

The two, each of whom at one time belonged to the other's branch of service, share more than a successful radio show in common. Since they teamed up they have been recruiting new sailors and airmen at a pretty good clip.

One of the reasons for their success has been guest appearances by people like Skip Young (above on the left) who is known to millions as Wally of the Ozzie and Harriet Television Show of the '50s.

A lot of kids in the Barstow area know about Wally and Happy Harry and Smilin' Jack because of the successful radio show. But what may be more important is that those same kids also know quite a bit about the Navy—and that other branch of service which flies a lot of airplanes.

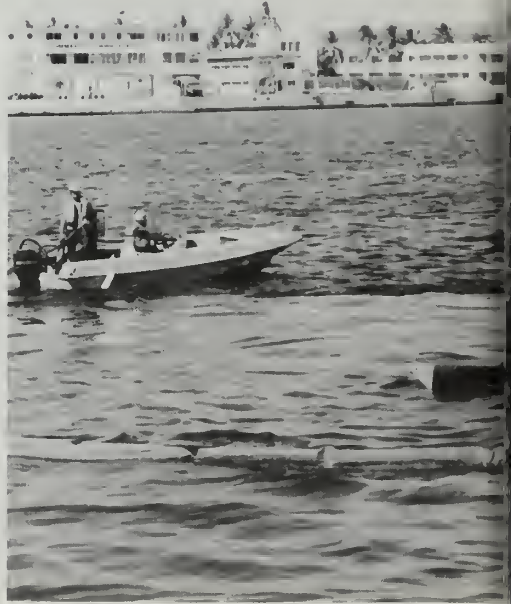
Oily Palate Pays Off

A Pearl Harbor Navy couple has found a way to enjoy a greasy-foods diet without gaining a pound. In the process, they manage to contribute to the fight against water pollution. *E. B. Bolosan* is an oil skimmer craft that has slurped up 15,000 gallons of oil in the 18 months she's been at Pearl.

In spite of her steady diet, she remains a fit and trim 20,000 pounds and she's still capable of squeezing around piers and ships and into tight areas where floating oil forms into pockets. Designed to collect oil spills quickly and efficiently, *Bolosan* is self-propelled and can be operated by one person.

The other soft spot in the hearts of the harbor cleanup crew goes to "Juicy Lucy," a converted World War II landing craft.

Bolosan's palate is tickled only by a



steady diet of oil, but Juicy Lucy is less discriminating. She is quite happy slurping up everything from driftwood to tin cans. Between the two of them they are doing a good job of licking the harbor "plate" clean.

Charting His Art

Tell Lieutenant Bruce Koltz that the only successful artist is the highly trained artist and you'll probably get an argument.

Koltz—who has a penchant for scribbling on charts and has received only a year of formal art education—recently picked up not only the Coronado (Calif.) Art Association's Artist of the Month Award, but also won first place in an 11th Naval District Arts and Crafts Fair and first in the Heritage 1976 Art Exhibition graphics category.

The USS *Bristol County* (LST 1198) officer's style of drawing over navigational charts developed in a coincidental way. "In January 1974, I had the urge to draw, but I didn't have any paper," he said. "My roommate was the ship's navigator and he let me search through a pile of discarded charts. I was looking for a big piece of white paper, but decided to use the front of a chart instead."

That first chart drawing led to many, many more, until nowadays Koltz spends four to nine hours a week perfecting his art. His room is appropriately wallpapered with navigational charts. Each chart he uses pertains to the particular ship he's drawing. Now, however, he purchases his charts from a local distributor.

After having completed more than 200 chart drawings, Koltz appears to have hit upon a good thing—without much training.

Bearings

Tri-Nation Exercise

There were *Tomcats, Skyhawks, Harriers, Sea Knights, Sea Stallions, Cobras,* gators, leathernecks . . . and, of course, koalas, wallabies and kangaroos.

America's finest were on display in October as nearly 17,000 U. S. servicemen joined 14,000 members of Australian and New Zealand armed forces in Kangaroo II. This was the largest peacetime exercise ever conducted in Australia.

The 31,000-strong tri-nation military force converged in 40 ships and 250 aircraft off Australia's northeast Queensland shore under sunny skies for the 17-day ANZUS exercise. Kangaroo II was designed to test and refine procedures for combined operations in the defense of a coastal area.

Highlight of the exercise was the massive amphibious assault launched by the Navy-Marine Corps sea-air-land team in Shoalwater Bay, 500 miles north of Brisbane.

High-flying Celebrants

With a task group of three U. S. Navy ships (CTG 101.1) as special visitors, the East African nation of Kenya celebrated the 13th anniversary of its independence in December.

Officers and men of USS *Guam* (LPH 9), USS *Claude V. Ricketts* (DDG 5) and USS *Dupont* (DD 941) were hosted by celebrants of this former British colony. They, in turn, played hosts to the many eager shipboard visitors during the four-day stay in Mombasa.

Official ceremonies marking the anniversary were held in Kenya's capital of Nairobi, 250 miles inland. Flying from *Guam,* the AV-8A *Harriers* of Marine Attack Squadron 231 saluted Kenya in a tightly executed flyover.

The Chief of Naval Operations, Admiral James L. Holloway III, said that the "highly successful participation of AV-8A aircraft in Kenyan Independence Day activities once again demonstrated the ability of the Navy to respond when needed in furtherance of diverse national policy objectives."

He extended his personal "well done" to all concerned.

Visiting U. S. Sailors and Marines took in the sights and sounds of Mombasa. They also visited the famous wild animal preserve and the ancient Arabian bazaars. Purchases were concluded despite the babble of many tongues.

Aboard the ships, a special visiting program was set up which allowed Kenyan naval officers and enlisted men to visit their American counterparts.

The American Ambassador to Kenya, Anthony D. Marshall, said that he took pride in the peaceful mission.

"This particularly applies," he added, "when—by peaceful actions—the United States, through the Navy and Marine Corps, can 'show the flag' toward maintaining peace."

Wail of a Banshee

Aviation Administration Man Third Class Mike Baumeister—Navyman and college student—is a part-time banshee.

At least, Mike's bagpiping may sound like the wail of a banshee to some, but it's music to his Scottish ears. When not at work at Naval Air Station, Patuxent River, Md., or attending school at St. Mary's College of Maryland, Mike can often be found strolling the banks of Patuxent River playing 16th century bagpipe songs.

His grasp of things Scottish traces to his mother's side of the family. Besides playing the bagpipes he has traveled through Scotland while on leave and collected Scottish memorabilia, including the kilt. ("A true Scot would never, ever discuss what he wears under his kilt," he said with a grin.)

He plays the bagpipes during his "quiet time" and, since neighbors and friends don't often agree with his interpretation of "quiet time" Mike has settled on what many may consider an appropriate vocation. He's studying to become a forest ranger.

Top SurfPac Enlisted

New Master Chief Petty Officer for the Naval Surface Force Pacific is Master Chief Boatswain's Mate Jesse J. Holloway. A native of Enfield, N. C., the 27-year Navy veteran previously served in USS *Monticello* (LSD 35) as Master Chief Petty Officer of the Command and also as that ship's training team leader and enlisted watch coordinator. The new MCPOF was promoted to E-9 in Jan. 1973.

TOMAHA

WK adds up to versatility

BY LT PHILIP KAZANJIAN

The Navy's *Tomahawk* Missile—now being perfected—is so accurate that a nuclear submarine could fire one at a street corner 450 miles away, and hit within 30 feet of the traffic light at that corner.

Scheduled for initial deployment to the fleet in the early 1980s, the *Tomahawk* is a highly versatile weapon capable of being launched from surface ships, submarines, aircraft or land platforms. The missile's versatility, range and accuracy have made the *Tomahawk* program "the most important we have underway in regard to potential and application," according to Deputy Secretary of Defense William Clements.

Basically the *Tomahawk* is a relatively light (2650 pounds), small (219 inches long by 21 inches in diameter), pilotless airplane propelled by a turbofan engine. Its Soviet counterpart, now standard on most Soviet warships and older submarines, is 37 feet long and weighs 26,000 pounds.

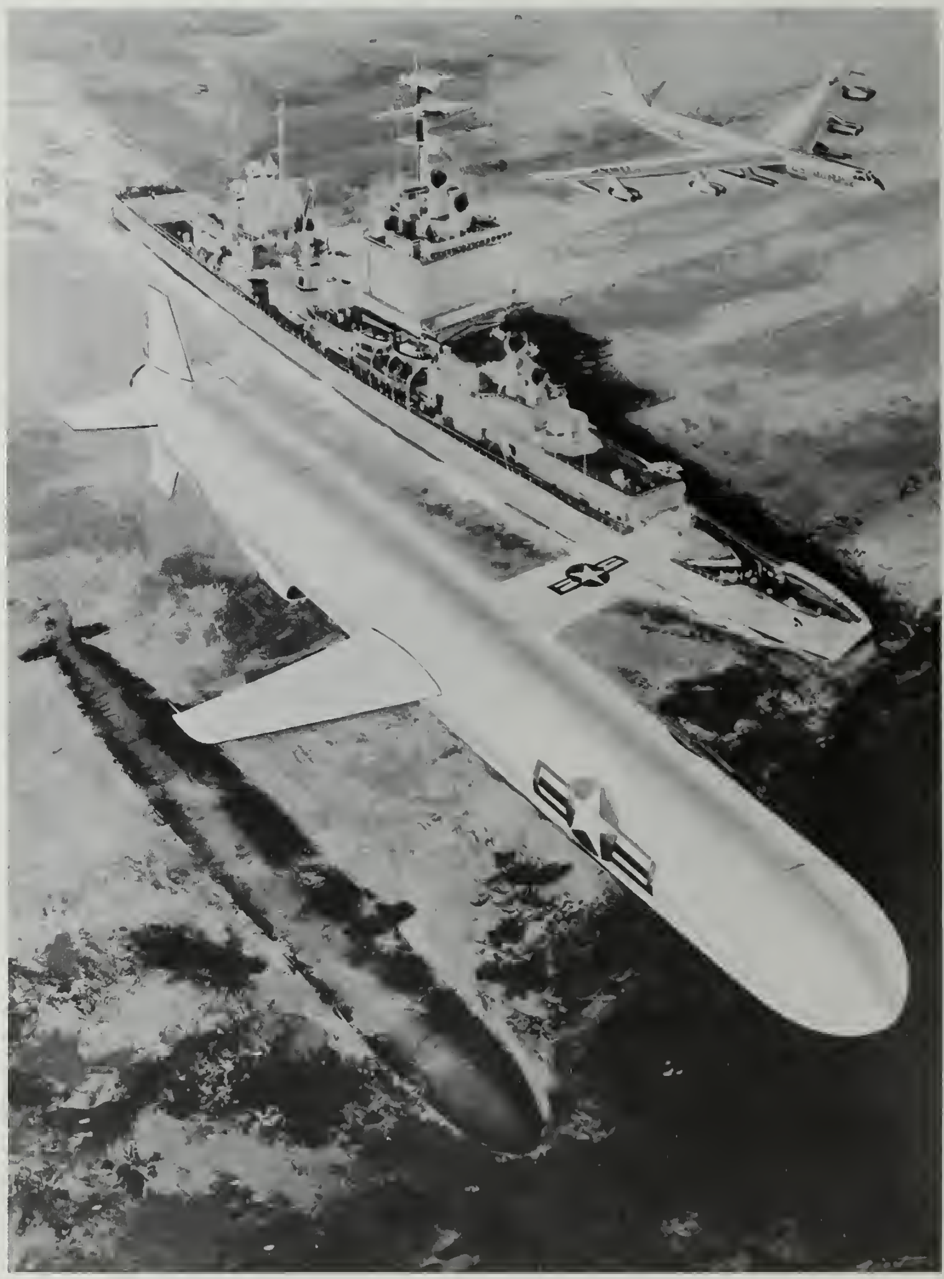
Tomahawks contain a number of features which represent major technological breakthroughs in weapon development:

- The turbofan engine powering the missile weighs only 130 pounds and is less than three feet long. Considered to be one of the smallest turbofan engines in the world, it is capable of developing more than 500 pounds of thrust at cruise conditions and able to

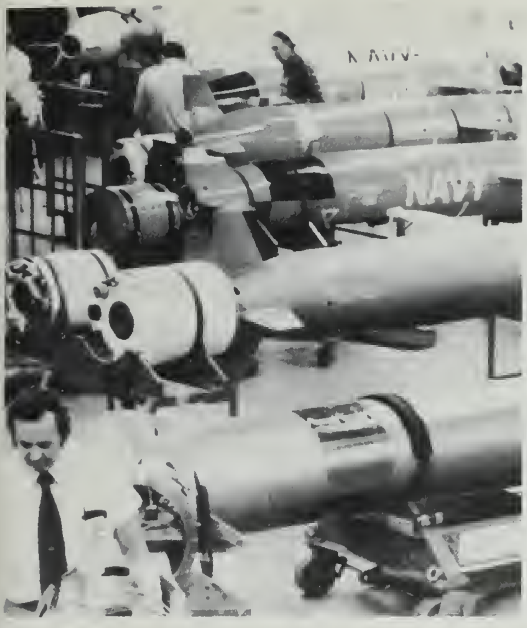
propel *Tomahawk* at high subsonic speeds.

- There are two variations of the missile—nuclear and conventional. *Tomahawks* carrying nuclear warheads will have ranges of approximately 2,000 miles. The conventional version, designed for antiship missions, has an operational range of over 250 nautical miles. Both the nuclear and conventional versions are highly accurate.
- The long-range land attack *Tomahawk* owes its accuracy to an onboard computer, a radar altimeter, inertial guidance, and a navigation system called TERCOM (terrain contour mapping). The system allows the cruise missile to hug the ground while maintaining very low flight altitudes, over varying degrees of terrain roughness. In this way *Tomahawks* are able to avoid detection by long-range early warning enemy radar.

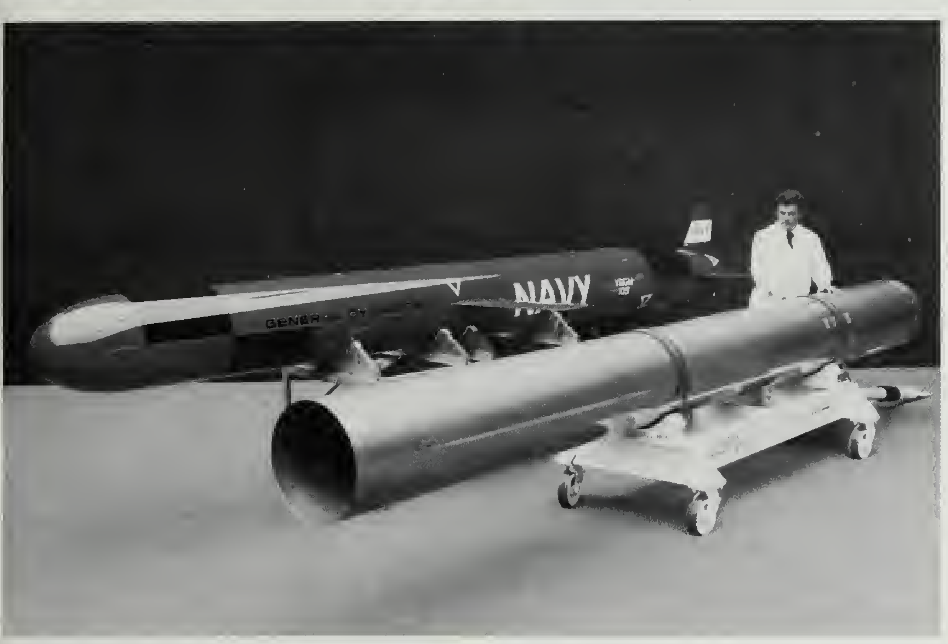
Because *Tomahawk* is designed for launch from submarine torpedo tubes, it is readily adaptable for use on any platform. When fired from a submarine, surface ship or ground launcher, the missile is powered by a solid-propellant rocket motor. Once in flight, wings and fins are deployed from stowed positions within the cylindrical missile body. The rocket motor continues in use until *Tomahawk* reaches a speed which permits its turbofan en-



Above: A versatile missile, Tomahawk can be launched from submarines, surface ships, aircraft and land platforms; here it is mounted on an A-6 Intruder. At Right: Artist's concept of missile in flight. (All General Dynamics photos.)



Left: Production and assembly of Tomahawk Cruise Missile at West Coast plant. Below: Off the production line.

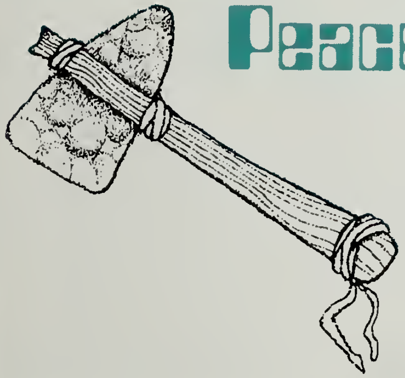


gine to take over for the cruise portion of the flight.

One major advantage of *Tomahawk* is the capability to strike at land and sea targets from outside the enemy's weapons range. While *Tomahawk* won't replace the torpedo, it is expected that a number of cruise missiles will be carried by submarines. The exact number, of course, will be dictated by mission, nature of threat and geography.

Although *Tomahawk* Missiles are but one of the Navy's ongoing hardware developments, it is recognized, according to General George Brown (Chairman of Joint Chiefs of Staff), as "having significant use in the Navy's vital sea control mission." ⚓

Symbolic of Both War and Peace



Named "otomahuk" by Algonquians living along the St. Lawrence, the tomahawk was the war hatchet of the North American Indians. Meaning "to knock down," it was used both in hand-to-hand combat and as a throwing weapon, but also served as a small axe.

Most tomahawks were made of a stone sharpened at the ends and driven into a hole bored through a stout wooden cudgel. More primitive types, however, had stone heads simply bound to clubs with animal sinews or tough vines. A deer antler was sometimes substituted, making the weapon's appearance similar to a modern pickaxe and just as deadly.

After the arrival of Europeans, stone was abandoned and heads were usually fashioned of iron but sharpened at one end only. The blunt end was occasionally chipped out and made into a pipe bowl—the hollowed handle served as a stem. Known as peacepipes by white men, these tomahawks were venerated by all tribes and displayed in their chiefs' wigwams.

Symbolic of both war and peace, the tomahawks were ceremoniously buried at the end of hostilities to be exhumed with equal pomp when war resumed—hence the expression "burying the hatchet."

Information Exchange

Q. *Can the Navy require its people to pay a private debt? How can indebtedness affect a Navy person's career?*

A. The Navy is without legal authority to require a service member to pay a private debt or to divert any part of his/her pay to the satisfaction of a debt, even though a civil court has directed payment.* On the other hand, Navy personnel are not, by virtue of military status, released from any continuing obligation to obey pertinent civil laws which may require payment of debts. A Navy person who repeatedly incurs debts beyond his or her ability to pay may jeopardize security clearance status, advancement status, certain duty assignments, and qualification for reenlistment or extension of enlistment.

**However, pay may be directed to be garnisheed in cases of alimony and child support nonpayment.*

Q. *If I enroll in an academic program under the Navy Campus for Achievement, how long may I take to earn my college degree?*

A. If you enroll in an NCFA degree component institution, you will have 10 years from the date of your Letter of Agreement to complete your academic program, whether or not you stay in the Navy.

Q. *Why did the Department of the Navy cancel its Proficiency Flying Program?*

A. The Department of the Navy undertook an extensive review of the Proficiency Flying Program because of budgetary constraints, and found that about $6.5 million might be saved annually. The money saved will be reprogrammed to other, more essential, aviation requirements.

Q. *Why do certain enlisted personnel graduate from "A" school and then proceed to a shore command for a period of 15 to 18 months while others spend their entire first enlistment aboard a Navy ship without the option to transfer?*

A. With the new concept of fleet manning, "A" school students going to CONUS shore duty are assigned tour lengths of 18 months; outside CONUS they are assigned IAW Chapter 4 of the Enlisted Transfer Manual, thus releasing personnel for earlier rotation to sea duty commands.

As far as your being required to remain in one ship for an entire enlistment, once you have completed a minimum activity tour of 24 months you can put in an Enlisted Transfer and Special Duty Request Form (Navpers 1306/7) requesting transfer to another activity—this is covered in Chapter 3 of the manual. Another option is the self-negotiated exchange of duty (Swap). If both commands are in agreement, first-termers are given the opportunity to swap to either sea or shore duty, provided all eligibility requirements are met and that all swaps are executed at no cost to the government.

Q. *What practical qualifications must an officer demonstrate, in addition to passing the written test, to be qualified for command?*

A. First, he must qualify as an engineering officer of the watch. This can be done during a present shipboard tour or can be authenticated from qualification achieved during a previous tour. Next he must demonstrate seamanship prowess under cognizance of an officer of the grade of captain in the following: mooring, getting underway from a pier or nest, anchoring, maneuvering in restricted waters, recovering (simulated) a man overboard, replenishment at sea, and evolutions peculiar to ship type.

Q. *Under the new method of determining Champus payments, how much are doctors and other providers of medical care allowed to receive?*

A. Under the new method, a factor known as the 75th percentile is used. This does not mean that Champus payments are reduced to 75 per cent of the billed charges, but simply that the prevailing charge is now set at an amount which is high enough to cover the usual charges for any service or supply in three out of four bills from all doctors or other providers of medical care. These rates are determined during the previous year, and there may be differences due to varying local rates. ⚓

Ruth Hank-Hon. Mention, '76 Cartoon Contest

". . . Yes, Smedley, we know they depend on you . . . Still, they're not dependents."

BEAT ARMY!

(Continued from page 27)

shot higher, the hundreds of pleasure craft in the harbor were illuminated by the raging bonfire. Now the countdown began in earnest: one more day of classes, Thanksgiving Day and then on to Philadelphia for the game.

Saturday morning at John F. Kennedy Memorial Stadium in Philadelphia didn't look promising. One of the stadium security guards, portable radio next to his ear, stood in the soggy end zone and gazed at the black scudding clouds. "Hey, gang, it'll be fair today," came the radio announcer's voice, "with absolutely no chance of rain and a record-breaking high temperature of 60 degrees. I'll be back with a look at the national map after this important word. . . ." The guard snorted.

Concessionnaires fought the blustery winds as they set up hot dog, popcorn and soda stands. A network television cameraman, walking hunched over against the wind, moved from stand to stand. "All the hot chocolate in the world," he said to no one in particular, "but not a single cup of coffee is ready yet."

Caravans of buses from Annapolis and West Point rolled into the parking lot at almost the same time. Spectators, trudging toward the stadium —arms laden with blankets and thermos bottles—paused to cheer or bleat derision as the "good" and the "bad" guys passed.

The thousands of milling blue and grey uniforms surprisingly sorted themselves out and quickly began forming into solid blocks—ready to enter the stadium.

The pre-game activities were handled with dispatch. First the massed Corps of Cadets, then the Brigade of Midshipmen were presented to the audience. The combined West Point and Annapolis choirs sang the National Anthem, the starting lineup of each team was announced and the coin-toss was handled with aplomb at the 50-yard line. It was time to play some football.

Almost.

An official black limousine with two streaming American flags and surrounded by running men entered the stadium and came to a screeching halt in front of the VIP box on the Army side. Many of the Army cadets sprang from their seats to rigid attention.

Out of the limousine rolled a burly man wearing a Gerald Ford rubber mask. The Naval Academy's Brigade Activities Committee, also known as the Bizarre AC, had struck again.

Preliminaries and pranks finally finished (or were they?) the teams finally began the game.

The excitement and color accompanying any college football game was present, but here the excitement was magnified by 77 years of traditional rivalry. And the color was intensified by the masses of blue and gray uniforms (and a couple of artfully placed green and white smoke bombs in the Army ranks—the Bizarre AC's final ploy.)

Early in the fourth quarter, with Navy holding a not-necessarily-insurmountable lead, a midshipman—girlfriend on one arm, air horn and blanket in the other—was seen leaving the stadium.

"The sun just broke through the clouds and shone directly on the Navy huddle," he said. "If that doesn't mean we've got it all wrapped up, I don't know what does."

Navy had wrapped it all up. The midshipmen trounced Army for the fourth year in a row, 38-10.

And as the 4,000 midshipmen poured from the stadium, one couldn't help but wonder. Could there be one plebe among them who —at that very moment was formulating an Army-Navy week prank that will finally eclipse the car-demolishing stunt?

Time will tell. ⚓

Some of the old traditions, like the post-game cuff link exchange between cadets and midshipmen, took a new twist this year.

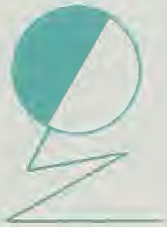
Stern Shots

How well can you read a damage control diagram? In an emergency, the safety of your ship could depend on your knowledge.

The symbols below are commonly used to indicate valves and other fittings on damage control diagrams. Can you identify them? Test yourself. Here are the answers, match them with the proper symbol.

Answers appear below.

______1. Hatch
______2. Bulkhead penetration
______3. Sea chest
______4. Stop-Lift check valve
______5. Relief valve or spring-loaded check valve
______6. Fog foam proportioner pump and control
______7. Remotely operated closure fitting



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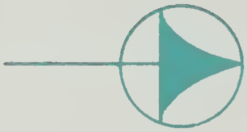

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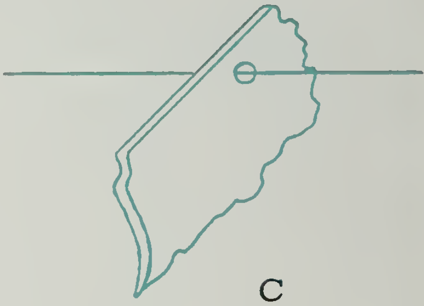

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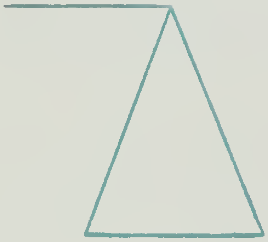

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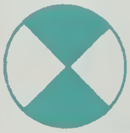

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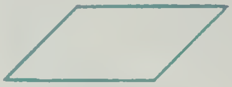

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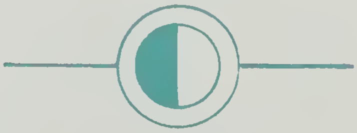

G

Answers to quiz: 1.(F); 2.(C); 3.(D); 4.(E); 5.(A); 6.(G); 7.(B).

Secretary Honors Navy Wives

Outgoing Secretary of the Navy J. William Middendorf II takes to the boatswain's pipe in presenting a specially prepared certificate of appreciation to Mrs. Dabney Holloway (center), wife of the Chief of Naval Operations, and Mrs. Frances Walker, wife of the Master Chief Petty Officer of the Navy, on his last day in office. The certificate noted both ladies' "steadfast, unselfish and too often unheralded contribution in furtherance of Navy goals. . . ." By this presentation, the Secretary honored the quiet and dedicated efforts of the wives of all Navy officers and enlisted men the world over. Photo by David Wilson.

Base Beautification page 28

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THEY KEPT THE SEA LANES OPEN

ALL HANDS
MARCH 1977

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W. Graham Claytor, Jr., is sworn in as Secretary of the Navy by U. S. District Court Judge Gerhard A. Gesell in the Pentagon. Mrs. Claytor, a former Navy lieutenant commander, holds the family Bible. Right are Secretary of Defense Harold Brown and Vice President Walter Mondale. See biography on page 29. Photo by JOC Dick Montgomery, USN.

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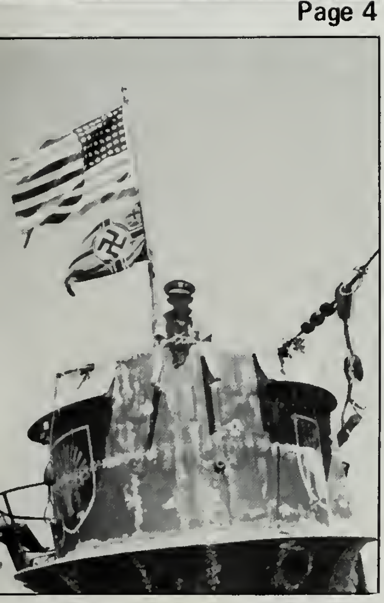

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ALL HANDS

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MARCH 1977 NUMBER 722

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Chief of Naval Operations Admiral James L Holloway III
Chief of Information Rear Admiral David M Cooney
Dir Print Media Div (NIRA) Lieutenant Commander D McCurrach
Editor John F Coleman
Production Editor Lieutenant John Alexander
Research Editor Ann Hanabury
Layout Editor E L Fast
Art Editor Michael Tuffli

Staff LT Bill Ray
JO1 John Yonemura
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JO3 Alan Meyer
JOSN Francis Bir
Edward Jenkins
Elaine McNeil

Currents

BuMed Recommendation for Radiation Therapy Patients ● BuMed is alerting military health care beneficiaries to the risk of thyroid disorders in patients who have received radiation therapy to the head, neck and upper chest – an accepted medical practice during the 1940s and 1950s. According to the National Cancer Institute, the percentage of such patients who develop tumors is small, and most of the tumors found in the thyroid gland are benign. Of the tumors found to be malignant, most are slow growing and can be cured by surgery if diagnosed early enough. The risk does not include people who have received routine diagnostic x-rays of the chest, head and teeth. People who received radiation therapy and are eligible for care in a uniformed services medical facility should seek medical evaluation from the facility where they normally receive care.

Navy Command Receives Coast Guard Commendation ● Coast Guard Commandant Admiral O. W. Siler has presented the Coast Guard Meritorious Unit Commendation to Fleet Training Group, Pearl Harbor. Cited for meritorious service in support of the Pacific Area Coast Guard Training and Readiness effort from May 1, 1974 to Jan. 31, 1976, the Group is a unit of the Training Command, Pacific Fleet. The award was accepted by the Group's commander, Captain Cornelius J. Carmody. Fleet Training Group, Pearl Harbor provides underway refresher and shakedown training, tactical team training and approximately 55 formal courses of instruction to Navy and Coast Guard units operating in the mid-Pacific area.

Program Improvements Recommended by Navy's Equal Opportunity Experts ● Greater emphasis on Command affirmative action plans and increased efforts to structure attainment of the self-sufficiency goals in equal opportunity training, were two recommendations made recently by the Navy's top Equal Opportunity Assistants. These suggestions were made during a three-day conference in Washington, D.C. The conference, the first of its kind, focused on the effectiveness of current Navy equal opportunity policies and programs. Sponsored by the Deputy Chief of Naval Operations for Manpower, the conference featured a series of work group sessions that addressed the most pressing issues in the equal opportunity program. In addition, briefings were held on the current status of women in the Navy and JAG information on the procedures for redress of wrongs. Other briefings included procedures used by the Board for the Correction of Naval Records and the Navy's efforts in the civilian equal employment opportunity area.

CPO Sea/Shore Rotation Standardized Under New Plan ● By October, all chief petty officers with 19 years or more service will be guaranteed a minimum three years of shore duty with a maximum three-year sea tour under a new rotation plan announced by the Bureau of Naval Personnel. The program will reduce long sea tours and corresponding family separation for career personnel who have historically seen only token relief in reduction of tour lengths. Initially, eligible members serving ashore will receive an extension to provide up to a minimum 36-month tour. The new 3/3 rotation begins in June for the following ratings: (E7-E9) BM, BT, EM, EW, GMT (0891), HT, MM, ML; (E8-E9) GM, FT; (E7) FTG, GMG, PM; (E7-E8) IM, QM, OM and PI; the remainder will come under the new policy by October. Because of unique requirements, women and the UDT/SEAL community are not included in the new plan. Also, the CT rating will have a one-for-one rotation for duty in CONUS and overseas. Further details will be carried in a future NavOp and BuPers Notice.

Radio Tape Service Available for Deployed Ships ● Radio Tape Service (RTS) programs, consisting of 84 hours of weekly radio entertainment and news/information, are available for all deployed Navy ships and submarines. Ships desiring to receive RTS should contact the CinCLantFlt or CinCPacFlt Public Affairs Office by telephone or message to request this service before deployment. FTS is provided by the American Forces Radio and Television Service-Los Angeles (AFRTS-LA).

All-Navy Sports Schedule is Announced ● The schedule for All-Navy sports and talent championship competition has been announced by the Bureau of Naval Personnel. Dates and locations of tournaments for both men and women are:
bowling, NTC San Diego, Calif., May 16-20;
slow-pitch softball (men), NAS Pensacola, Fla., July 25-29;
slow-pitch softball (women), NAVSTA Charleston, S.C., Aug. 1-5;
golf, NAVSUPPACT Long Beach, Calif., Aug. 15-19;
sailing, NTC Great Lakes, Ill., Sept. 7-9;
tennis, NAS Barbers Point, Hawaii, Sept. 19-23;
chess (sea services), Ft. George G. Meade, Md., Oct. 19-26;
and talent, NTC San Diego, Calif., Nov. 14-18.

Admiral Turner is Now CIA Director ● Admiral Stansfield Turner has been confirmed as the Director of Central Intelligence. Prior to ratification by the Senate, Adm. Turner, 53 served as Commander in Chief, Allied Forces Southern Europe. He is now responsible for overseeing all U.S. intelligence operations outside the United States. A native of Highland Park, Ill., Adm. Turner graduated from the Naval Academy in 1946 (class of 1947). A Rhodes Scholar, he obtained a Master's Degree in philosophy, politics and economics from Oxford University in 1950. Adm. Turner's past assignments include command of three ships and a Sixth Fleet carrier task group, and a tour as President of the Naval War College. He was commander of the Second Fleet and NATO Striking Fleet Atlantic prior to assuming his present command. Three other naval officers have been directors of the CIA: Vice Admiral William Raborn, Jr., and Rear Admirals Sidney Souers and Roscoe Hilenkoetter.

New Submarine Trainer Put Into Operation ● A new submarine trainer that can be changed to look and perform like any one of 10 classes of submarines has been put into operation at the Naval Submarine School at Groton, Conn. Called the Multi-Class Ship Control Trainer, it can be modified to represent characteristics of different submarines by reprogramming its computer, controlling the instruments, and by moving equipment inside the trainer to represent the interior of a particular submarine. Other sub trainers at the school can represent only up to three different classes of subs.

CNO's Annual Posture Statement

The statement that follows is part of the annual posture statement delivered to the Senate Appropriations and Armed Services Committees by Admiral James L. Holloway III, Chief of Naval Operations. Presented in February, the statement addresses the primary roles and missions collectively assigned to all Navy commands and personnel in support of national defense.

A. Strategic Principles

The principles upon which the United States, national strategy depends are significantly influenced by its geopolitical insularity on the North American continent. This requires that U. S. national security cannot be assured without the balance of maritime superiority residing in favor of the United States and its allies. The United States Navy is the principal force to achieve and maintain the maritime superiority upon which the nation relies.

B. Mission

The mission of the U. S. Navy, as set forth in Title 10, U. S. Code, is to be prepared to conduct prompt and sustained combat operations at sea in support of our national interests; in effect, to assure continued maritime superiority for the United States. This means that the U. S. Navy must be able to defeat, in the aggregate, the potential threats to its continued free use of the high seas. In its simplest terms, defeating the maritime threat means destruction of hostile aircraft, surface ships, and submarines which threaten the seaborne forces of the United States and its allies.

C. Functions

Maritime threats can be attacked and destroyed on the high seas or in their base areas. Therefore, the functions the U. S. Navy is required to perform to fulfill its mission, as expressed in DoD Directive 5100.1, may be broadly categorized as sea control and power projection.

1. Sea Control.

Sea control is the fundamental function of the U. S. Navy and connotes control of designated air, surface, and subsurface areas. It does not require simultaneous control

CNO's Annua

over all international waters, but is selective and exercised only where and when needed. Sea control is achieved by the engagement and destruction of hostile aircraft, ships and submarines at sea, or by the deterrence of hostile actions through the threat of destruction.

2. Power Projection.

Power projection is interrelated with sea control and ranges from strategic nuclear response to attacking hostile forces and their facilities ashore through aircraft, missile, or gun bombardment to prevent hostile forces and facilities being used against friendly forces and commerce at sea, or the seizure of base areas and facilities ashore through amphibious operations to deny their use by an enemy.

D. Roles

In the functional exercise of its mission responsibilities within the national military strategy, the U. S. Navy has three main roles: strategic deterrence, overseas deployed forces, and security of the sea lines of communication.

1. Strategic Deterrence.

This is provided by the high level of survivability of the fleet ballistic missile force, a major component of the strategic Triad.

2. Deployed Forces.

Deployed naval forces support forward-positioned U. S. ground and air forces and U. S. allies, and provide the nation the capability to use those naval forces in support of political objectives.

3. Security of the Sea Lines of Communication (SLOCs).

This requires naval forces implementing their sea control function to assure the security of the SLOCs between the U. S. and its overseas-deployed forces, between the U. S. and its allies, and the lines of sea commerce linking the U. S. and its allies with the sources of the world's critical raw materials, particularly energy, upon which the economic survival of the free world depends.

E. Responsibilities

In order to fulfill its mission, functions, and roles, the U. S. Navy has two main responsibilities: current fleet readiness and modernization.

1. Fleet Readiness.

This is the capability of naval forces to carry out their roles in prompt response to the orders of the Commander-in-Chief. Fleet readiness is the product of three factors: personnel readiness, material readiness, and operational training.

a. Personnel readiness depends upon:
   (1) Adequate numbers to man and support the fleet, and
   (2) Proper skills to maintain and operate the ships, aircraft, and support systems.
b. Material readiness depends upon:
   (1) Ship maintenance,
   (2) Aircraft rework, and
   (3) Logistic support.
c. Operational training depends upon adequate:
   (1) Steaming days,
   (2) Flying hours, and
   (3) Exercises.

2. Modernization.

Modernization is the continuing program of phasing new and modern equipment into the fleet as worn-out and obsolete equipment is dropped from the active force inventory. Modernization includes:

a. Shipbuilding,
b. Aircraft procurement, and
c. Weapon system development and acquisition.

F. Shipbuilding

Of these modernization elements, shipbuilding is the most complex and demanding because the long life and high initial unit cost of a ship are generally unique in defense programs. Therefore, the most careful planning is required to ensure that a ship will be a useful investment over its programmed lifetime. For this reason, major ships must be multi-purpose in concept and capabilities in order to adapt to changes in strategies and areas of operation; their design must be flexible enough to permit weapon system modernization needed to counter emergent threats

Posture Statement

and weapon technologies. The factors which must be considered in shipbuilding are:

1. Long Planning Times.

a. The construction period of a major warship will take four to seven years from Congressional approval to initial operational capability (IOC), depending upon size, complexity, and design.
b. The useful lifetime of a major combatant is 20 to 30 years. A ship's lifetime can be extended for another 10 to 15 years through extensive material rework and weapon system modernization.

2. High Unit Cost.

The high unit cost of a naval ship is due primarily to its complexity in comparison to a commercial ship. All installed weapon systems must be included in the total cost of a naval ship in the end cost system of budgeting. In addition, because of the requirement for full funding, costs must be escalated over a ship's lengthy construction period to accommodate inflation.

3. Evolutionary Nature of Fleet Modernization.

The long life of a ship and the high cost of replacement result in most major ships remaining in active service for the full span of their material lives. For this reason, the composition of the fleet is relatively slow to change. One can predict with precision the force structure of the fleet out to 10 years because of the five-year shipbuilding plan and the five-year average construction period. Twenty years from now, 70 per cent of the ships in the active force today will still be in the fleet. Forty years in the future, the major units in the fifth year of the five-year plan will just be reaching the end of their useful lifetimes. Because of the evolutionary nature of naval change, new ships must be designed to operate both in the future and in a compatible way with those ships already in the force.

G. Generation of Naval Requirements

Because of the unique investment considerations involved in fleet modernization, new ships must produce a force structure which at all times retains the warfighting balance to cope with coordinated air, surface, and submarine threats in any theater. The Soviet Navy today has capabilities in all naval warfare areas. And the Soviet Navy continues to grow in capability, especially in its ability to conduct multi-dimensional naval warfare in ocean areas remote from the Soviet Union. U. S. naval forces must be prepared to conduct prompt and sustained combat operations wherever the threat may be. The growth in Soviet maritime capability for distant operations means that today's new ships, over their lifetime, must be able to face the best in weapon systems, in ever-broadening areas of the high seas, and win.

H. Readiness Assessment

1. Slim Margin of Superiority.

Today the United States fleet has a slim margin of superiority over the Soviets in those scenarios involving the most vital U. S. national interests. In the event of conflict, U. S. forces could retain control of the North Atlantic sea-lanes to Europe, but would suffer serious losses to both the U. S. and allied shipping in the early stages. U. S. ability to operate in the Eastern Mediterranean would be uncertain at best. U. S. fleets in the Pacific could hold open the sea-lanes to Hawaii and Alaska, but by reason of the shortages of sea control and mobile logistic support forces, the U. S. would have difficulty in protecting its sea lines of communication into the Western Pacific.

2. Future Balance.

The foregoing conflict evaluation refers only to the present. At the current rate of improvement of their naval capability, the balance of maritime superiority will tip in favor of the Soviets within the next five to 10 years if the United States simply maintains the status quo of the current force structure. Because it takes an average of five years for a unit authorized for construction to become operational in the fleet, the United States must build the requisite number of ships if the U. S. Navy is not to surrender the capability advantage necessary to accomplish its mission and retain its current marginal superiority at sea. ⚓

sailors and kids go together

Although many Navy ships participate in charitable activities when visiting overseas ports, the men of USS *Worden* (CG 18) recently demonstrated what enthusiastic participation is all about.

During *Worden's* overhaul at Yokosuka, where she is also forward-deployed, the 380-man crew adopted Kobo Cottage Orphanage and began an ongoing program to provide clothing, toys, linens and other essentials.

But it soon became apparent that the real needs of the 50 boys and girls were affection and personal attention. This realization set off a series of activities designed to ensure the orphans got just that.

Worden men began making weekend visits to Kobo Cottage, located 40 miles south of Tokyo. For many, traditional liberty weekend activities soon gave way to a few days of playing with the children.

A "special friend" program met with equal success. Participating crewmen took one or two youngsters out for a movie, a sporting event, or other special occasion.

Then the need for *Worden's* "sailor-to-orphan" program increased in importance as the holidays neared. For the Japanese, the holidays are traditionally a time for family get-togethers and celebration. The increased loneliness felt by children with no families during this period was quickly overcome by increased doses of *Worden's* own brand of affection and attention. In fact, eight orphans were taken into some of the crew's own homes for five days.

And after that year's end visit it was difficult to tell who was supposed to be cheering up whom. One crewman reported his children had fun with their visitor because, "Kids don't need a lot of language to understand each other and have fun."

Other crewmen echoed these sentiments: "My children were saddest of all when their friend had to go 'home,' " Chief Master of Arms Lyal Lura said.

When *Worden* completed overhaul and left, the crew took with them a memory of a relationship with the Japanese that many never achieve. ⚓

The Navy and Lawmaking

Your Programs in Congress

BY JO1 JERRY ATCHISON

RAdm A. R. Marschall, Commander, Naval Facilities Engineering Command, testifies before Congress.

Laws. Bills. The legislative process.

At the outset of one's Navy career, these terms probably call to mind vague recollections of some forgotten high school civics class. But it soon becomes apparent that laws and the legal process have a much more direct and important meaning to Navy men and women. Your last pay raise was a matter of legislation. So, too, is the ship or naval facility to which you are assigned. The funds that operate and maintain Navy commands, the very fact that they exist at all, are determined in the halls of Congress and the offices in the Nation's capital.

Laws have affected your past, and they will influence your future. Where do they come from? How do they become the law of the land? Does the Navy have any say in the matter? If so, how are the Navy's interests protected? In answering these questions, one must first understand certain basic relationships between the Navy and the Congress of the United States.

Article I, *Section 8,* of the U. S. Constitution spells out Congress' responsibilities for maintaining the Armed Forces:

"The Congress shall have Power to lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the *common Defence and General Welfare of the United States . . .*" In the same section, the Constitution gets even more specific: (The Congress shall have the power) "To provide and maintain a Navy; To make Rules for the Government and Regulation of the land and naval Forces."

Simply stated, Congress, as the elected voice of the people, is therefore the Navy's watchdog.

But the chain of responsibility doesn't stop there. Article II, *Section 2* defines another role, this one, the President's:

"The President shall be Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States when called into the actual Service of the United States . . ."

Clearly, Congress has the responsibility of ensuring that the American people have a Navy—as one service arm—that's prepared to meet the nation's needs at any time. Legislation pertaining to the Navy, therefore, is one of the means by which Congress fulfills that responsibility.

Given an understanding of this relationship, it is possible to take a look at the process by which a Navy idea becomes

Career Sea Pay Proposal

Sea pay, a subject dear to the hearts of all sailors, is just one example of the type of legislation the Navy puts before Congress for the benefit of its people and one which informed Navy people will be watching in the coming months. Now undergoing review in the Office of Management and Budget, the new career sea pay proposal will dramatically increase sea pay for some, and eliminate it for others. If approved, the new sea pay could become effective Oct. 1, 1977.

Current sea pay ranges from $8 to $22.50 a month—pay scales that were established in 1949. Currently, sea pay is paid to members assigned to all classes of ships and to embarked units and staffs, with the rates based on pay grade only. The new proposal would raise the minimum sea pay to $25, and raise the maximum to a hefty $100 a month. Payment would be based on total years at sea, regardless of pay grade. There would be certain qualifications, however, before a sailor was considered eligible for the new pay.

To qualify for the proposed sea pay, an enlisted person would have to have served three cumulative years at sea, have attained petty officer grade and be assigned to a ship, or embarked unit or staff designated as arduous sea duty by the Service Secretary. Commands whose primary missions are performed while in port—tenders, repair ships, etc.,—would be entitled to sea pay only when they are out of home port for more than 30 continuous days.

For those who stand to lose a portion of their paycheck if Congress approves the new plan, effective October 1, the net impact will be cushioned somewhat by an anticipated pay raise also expected on that date.

More important, the $8 or $9 monthly loss of sea pay for the ineligible first-term people during their initial three years at sea is more than recouped during the first 18 months of eligibility for career sea pay under the proposal, and over a 20-year career the new proposal offers more than double the amount of sea pay for the same number of years of sea duty.

Because sea duty is widely recognized as a unique and demanding form of duty to which virtually all Navymen will be repetitively assigned over a career, the Navy has made continuous efforts since 1967 to revise the sea pay entitlement. Although several prior proposals were submitted, each required substantial increases in appropriations; this alone caused each proposal to be rejected.

The current proposal has been approved by the Department of Defense and is presently at the Office of Management and Budget (OMB) for review before going to Capitol Hill.

Proposed Career Sea Pay Program

Years Sea Duty Cumulative	Sea Pay Monthly
Over 3	$25
Over 5	$35
Over 7	$45
Over 9	$55
Over 10	$65
Over 11	$75
Over 12	$100

a proposal for Navy legislation which, in turn, could eventually become the law.

One of the keys to Navy participation in the lawmaking process is communication—with Congress; with the Defense Department, and other branches of service; and with any other federal government agency or activity involved. Maintaining such communication is a big job that falls to the Navy Office of Legislative Affairs (OLA); a principal staff office under the Secretary of the Navy.

It is through OLA that all Navy-interest legislation flows. This office is responsible for monitoring the progress of such legislation.

There is a separation of responsibility in that items dealing with appropriations are handled by the Comptroller of the Navy. Matters dealing with the Joint Committee on Printing of the Congress are handled by the Assistant Secretary of the Navy (Installations and Logistics).

Following a hypothetical piece of legislation through channels will clarify the roles of the Navy and OLA.

Suppose a Navy office decides it wants to reorganize a major part of its operations. The proposal for the change is sent by the preparing Navy agency to OLA. As a first step, OLA sends the proposal out to other interested Navy agencies inviting comments and recommendations. Based on information obtained, OLA will coordinate a Navy position.

The resulting Navy proposed position then goes to the other Armed Forces since they, too, may have people or operations affected by the proposed legislation.

The Army and Air Force may make some comments, suggest some changes or merely concur with the proposal. The Navy, as originator, generally will consider the other services' recommendations and incorporate them into the piece of proposed legislation.

Next, the proposal goes to the Office of the Secretary of Defense (OSD) where a coordinated Defense Department proposal is put together. Any disagreement among the services is subject to a resolution of differences by OSD.

When a proposal has been devised that satisfies all the services and OSD, it becomes part of the DOD proposed legislative package.

But there is still more to be done with the proposal before it is presented to Congress. The proposal goes to the Office of Management and Budget (OMB), overseers of the President's programs and the nation's budget. OMB will coordinate comments and recommendations, including those received from any other interested executive department agencies. Only then is the proposal ready for presentation to Congress. The current DOD legislation will be considered by the 95th Congress (1977-78).

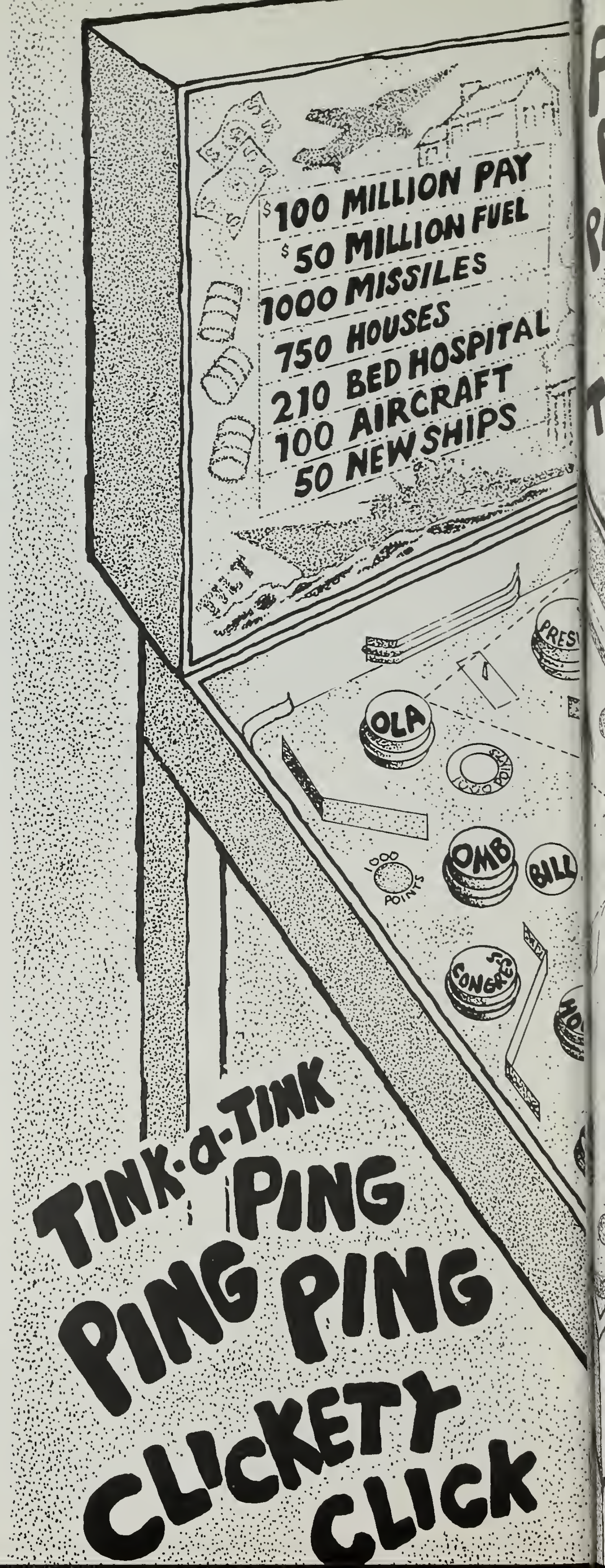
As far as the actual presentation to Congress is concerned, letters to the Speaker of the House and President of the Senate spelling out the coordinated proposed legislation are sent via the Secretary of the Navy by OLA.

The proposed legislation, by virtue of its introduction in Congress, now becomes a bill and is assigned a number. That bill is referred to the appropriate House and Senate committees—such as the House Armed Services Committee—for action. Committees, in turn, parcel the bill out to subcommittees that will be responsible for holding initial hearings on various sections. The hearings usually require that Navy experts be called in to testify on the nature, intent and scope of the bill. Once again, it's OLA's responsibility to round up these Navy witnesses and provide the subcommittees with all other information vital to understanding and acting upon the bill.

After exhaustive hearings the subcommittee makes a report to the full committee containing its recommendations and any changes or proposed amendments made to the bill.

The full committee, with the subject bill in hand, may decide to hold additional hearings, make still more changes or—assuming the bill survives—vote and report the bill out of committee to the House or Senate, as appropriate.

If the bill has been voted out of committee, it's now time for floor action. This is the time of debate, perhaps still more amendments and finally the vote. If the bill is passed it now becomes an act and is referred to the other legisla-



tive body (House or Senate) for similar action.

Once both legislative bodies have passed the act, it's time for the two to get together, compare notes and iron out differences.

If the versions passed by the House and Senate differ, the two bodies appoint a conference committee that meets, reaches agreement and issues a report to their respective bodies.

If both the House and Senate vote to accept the conference version of the act, it is enrolled and sent to the President for his signature.

The President, knowing that a lot has happened to the original proposal since it left the Navy, sends this final version of the act to OMB for coordination in its present form. This includes OMB sending it back to OSD for its recommendations of approval or veto.

Since the Navy originated the proposal, OSD assigns it to obtain, as the action agency, the coordinated DoD position. Within 48 hours, OLA must refer the act out to those Navy agencies that put together the original proposal, as well as the other services and get their approval or veto (with accompanying veto message) and send them, under the Secretary of the Navy's signature, back to OMB via OSD.

Assuming the Navy agrees with the new version, assuming OMB accepts the budgetary requirements and assuming the President agrees with the act, it is finally signed into law.

It is important to understand that at any point in this long-drawn-out procedure, the bill—even at birth as a proposal—can be pigeonholed and languish forever. Should nothing result in one session of Congress, the proposal must be reintroduced at the new session.

It is a complex system. But the fact is that the system can work incredibly fast or quite slowly. It is also a graphic example of how the American governmental system of checks and balances can and does work.

When a Navy proposal goes through the "bill-act-public law" phase, it is with the understanding that the consideration of what is best for the Navy and for the American public has been minutely scrutinized.

Right now, as you read this, hundreds of these proposals —either originated by the Navy or by other agencies that would affect the operation of the Navy—are in various stages in the pipeline. None will become law until all voices are heard and all comments recorded.

Any one person with one idea who says "There ought to be a law . . ." can particularly appreciate the chain of events he set in motion. ⚓

Grains of Salt

The Yangtze Was Their Home

BY LT TOM DAVIS, SC, USN

In the beginning, duty on China's Yangtze River had been uneventful yet it wasn't "bonus" duty by any standard.

U. S. Navy presence in China began in 1854 when the steam sloop *Susquehanna* chugged out of Shanghai with orders to protect the booming American business interests from bandits and warlords operating along the banks of the 3500-mile-long river. There was more to it than that, however. Dysentery and similar afflictions sometimes struck so many men that ships were unable to get underway for lack of crew.

Heat, especially below decks, made life on the river so unbearable that heat exhaustion was commonplace. In one instance, as the steam sloop *Wachusett* went upriver in 1866, her commanding officer died of a heat stroke.

Boredom was thrown in for good measure.

U. S. commerce had begun dwindling in the area after the American Civil War; by the turn of the century, there was little left to protect and many naval vessels rarely left port.

Predictable monotony gave way to unpredictable chaos in 1911, however, when the Manchu dynasty was overthrown. Thus began a period of confusion and conflict which was to last for 30 years—until the very end of the Yangtze Patrol. In fact, it was during this period that the patrol was officially named and Captain T. S. Kearney became the first ComYangPat in 1920.

Throughout World War I and into the 1920s, the patrol's gunboats earned their keep by protecting American businesses and citizens. It was an era of growing nationalism and antiforeign sentiment in China. Petty warlords and bandits sought booty while the political Chinese Nationalist movement spread to the Yangtze, sometimes producing mob violence.

Nanking fell to the Nationalists in 1927 and all foreigners along the Yangtze River were advised to evacuate. Besieged British and American outposts were in such danger at the onset that they signaled their destroyers and gunboats, "We are being attacked. Open fire. SOS SOS SOS."

Lieutenant Commander Roy C. Smith in USS *Noa,* acting on his own initiative, told his gunnery officer, "Well, I'll either get a court-martial or a medal out of this. Let her go, Bennie!" A barrage was laid down and the civilians were rescued.

Things settled down until 1931 when Japan invaded Manchuria and established a puppet republic called Manchuoko. Open war between Japan and China finally broke out in the summer of 1937. By November, every important city in northeast China, including Shanghai at the Yangtze's mouth, had fallen to the Japanese.

Once again, U. S. Navy vessels were required to evacuate Americans. When Nanking was attacked by the Japanese on Dec. 5, 1937, the U. S. Embassy urged the few Americans remaining in the city to embark aboard USS *Panay*. The gunboat weighed anchor on December 11 and moved upstream accompanied by three civilian tankers. She carried 15 evacuees including eight newsmen. Before long they were engulfed in a greater scoop than the fall of Nanking.

By 11:00 AM *Panay* and the tankers anchored in what seemed to be a relatively safe spot 27 miles upstream. Two hours later, *Panay's* bridge lookout spotted planes overhead and notified the commanding officer, Lieutenant Commander James J. Hughes. He came to the bridge and saw six planes in a line heading upriver, yet he wasn't immediately concerned—plane sightings were common and besides, *Panay* was readily identifiable by her large ensign and two American flags painted on her fore and aft deck awnings.

As they watched, three lead planes began to descend in the direction of the ship and suddenly went into a steep power dive. At the same time, a chief petty officer shouted, "They're letting go bombs!" Two hit *Panay,* wiping out the radio room and antenna and opening cracks in her hull. Crewmen manned their World War I-vintage machine guns and returned fire against the attackers, now easily identifiable by their Japanese insignia.

Panay was abandoned and by four o'clock she slowly rolled to starboard and sank by the bow as her crew watched from the riverbank. After bombing and strafing the three tankers, the low-flying planes began machine-gunning the lifeboats, wounding several aboard. Survivors struggled for three days through swamps and over unfamiliar terrain to bring their dead and wounded to safety.

When news of the losses became public, the American people demanded retribution. Official Japanese apologies were profuse. The rear admiral commanding the Japanese naval air units in China was relieved of command, and Japan paid a settlement of more than $2.2 million to the United States.

During the next few years, U. S. Navy gunboats did double duty to protect Americans and their property and were frequently fired upon and hit by small arms and artillery. The monotonous and boring earlier days soon became lively.

On Nov. 18, 1941 all U. S. naval forces on the Yangtze River were ordered out of China. On December 5, the two-star flag of Rear Admiral W. A. Glassford was hauled down and a brief message transmitted—"YANGPAT DISSOLVED." The U. S. Navy's sometimes boring, usually uncomfortable, and often embattled 87-year presence along the Yangtze had ended. ⚓

Visions of Ali

Jumping rope is hard work

...but I feel great!

(Editor's Note: It's that time of year again when we can no longer use "the weather" as an excuse to avoid physical exercise. But fitness is not a seasonal condition, nor is it strictly an outdoor activity. Here is the story of one Navyman who is overcoming a problem common to most of us.)

BY JO1 JOHN YONEMURA

Ever felt the Monday morning blues? That was how I felt ALL the time: sluggish, mentally and physically.

A couple of months ago I passed my reenlistment physical with no particular problem. My weight was all right. My heart and blood pressure were satisfactory . . . just satisfactory. The doctor, a jock from the word go, told me about an "aerobics physical fitness program." He explained all this rigamarole about putting stress on the heart, lungs and blood vessels for gradually longer periods of time to build endurance so that a person can better cope with physical and mental stresses.

". . . it took me 20 minutes just to jump that stupid rope 10 times without missing."

Well, that made me think. I did tire easily, and minor problems and petty hassles did have a tendency to get me down. Maybe, just maybe, my physical condition was the cause.

He introduced me to OpNav Instruction 6110.1, CNO's guidelines for physical fitness in the Navy. In it I learned that just keeping my weight down didn't mean that I was in shape. Speed, power, strength, agility and endurance are all factors of total physical fitness.

To be honest, I hadn't thought about any of those things since I played sports in high school.

Anyway, he showed me the list of different sports and exercises and explained how I could earn points for doing so many repetitions of an exercise or for playing a sport for certain lengths of time. Not being your most athletically inclined person, I knew I couldn't pursue some of them listed: football, basketball, handball, etc., etc.

But there had to be something I could do. Just the thought of jogging mile after mile or swimming lap after lap bored me. I'm an indoor person.

The day after my physical, I was picking up my daughter's jump rope in the living room with the immediate thought of scolding her for leaving it lying around. Then, an idea struck: no one was around so I tried to jump rope, visions of Muhammad Ali skipping so rapidly that the rope is a blur.

The doctor, a jock from the word go, told me about an "aerobics physical fitness program."

It hurts my ego to admit it (especially since my daughter does it so easily) but it took me 20 minutes just to jump that stupid rope 10 times without missing. And I was exhausted! I was puffing and wheezing and my heart was pumping like crazy. The doctor had warned me to start slow and build up, but I had certainly thought I could do better than that!

After that incident, I did my jumping in the basement. The kids giggled at first. My wife just smiled. She didn't believe I would stick to it. Well, it's getting to the point now where I'm considering doing it out on the sidewalk so everyone can see how well I'm doing.

I can jump for two minutes straight now. Oh, I admit I still miss here and there. I rest until my heartbeat is back to normal, then jump again. I'm trying to do this five repetitions, mixed with calisthenics.

After two months I figure I'm up to about 25 points per week; 30 points a week is considered the minimum for proper physical condition and, of course, you should do more than that to reduce your weight or to strengthen your body. Though not the minimum, 25 is certainly better than zero.

Hey, I feel great! I mean I really feel like I'm a changed person. In fact, I think I'm functioning more efficiently and with a lot more enthusiasm both at work and at home. I no longer feel the need to eat so much. I've cut down my smoking. I just don't feel the desire to smoke as much.

Physically, I feel more coordinated than before, even light on my feet. I can wrestle and play with the kids without tiring as rapidly as before. They really like that. I'm fun to them again (at least I think so) and that in itself makes it all worthwhile.

I'm due for sea duty my next rotation. I can remember using "being at sea" as an excuse for being physically inactive.

"Not enough room," I rationalized. You know, there are many athletic programs that require minimal space and with a little ingenuity can be adapted for shipboard use. I have to admit that a few years ago I was one of the first to laugh at my leading chief, who jogged the passageways and ladders in his attempt to keep his cardiovascular system in shape. I'm sure not laughing anymore, though I expect to be laughed AT in the future. At least I learned.

If they haven't already got a physical fitness program aboard, I'm going to help start one. "You only get out as much as you put in," the old saw goes, and I'm determined to put a lot into it.

If they don't have the money to provide equipment for some sports and exercises, or if they rationalize the way I used to—well, I'll have my jump rope.

How about you? Go ahead and laugh, but I feel great!

"Go ahead and laugh, but I feel great!"

Rights & Benefits

New Entitlements for Vets

Navy people with more than 181 days' service and a desire to continue their formal education while on active duty are now eligible to receive up to $292 a month in tuition grants under provisions of an updated GI Bill signed into law October 15. Also, the basic entitlement governing the number of months of paid-for schooling has been increased from 36 to 45 months.

The increases under the new Veterans Education and Employment Assistance Act of 1976 (as the new bill is called) also boosted veterans' entitlements. One major change increased potential monthly benefits of those enrolled full time in a qualified educational program: the single individual rate was increased from $270 to $292 monthly; one-dependent rate, $321 to $347; two-dependent rate, $366 to $396; and entitlements for those with more than two dependents increased from $22 a month for each additional to $24.

The grant-type GI Bill educational program currently in effect will end December 31, and a voluntary contributory educational assistance program will take its place and cover all people entering the armed services beginning in 1977. Those now on active duty who entered the service before January 1, however, will not lose their GI Bill educational benefits. They will have 10 years from time of discharge to use their entitlements or until Dec. 31, 1989, whichever comes first. However, they will not be eligible to participate in the contributory program.

The contributory program—jointly operated by the Veterans Administration and Department of Defense for a five-year trial period will require a $50 to $75 monthly contribution into an educational fund by each Navy person desiring to participate. Participants will have to make at least 12 consecutive monthly contributions to be eligible, but can contribute no more than $2,700. In turn, the VA will match their contributions $2 for each $1, and the law allows DoD to make additional contributions into individual accounts of participants working in critical ratings.

Unlike the provisions of the Vietnam War GI Bill currently in effect, the new law will not allow participants to use educational benefits until after they have completed their obligated service. Once their initial obligation is completed, members will have 10 years from the date of their last discharge to complete their entitlement.

Benefits will be paid monthly for a period equal to the number of months the veteran contributed to the fund with a maximum of 36 months—or the equivalent in part-time payments. The amount of the benefits will depend on the member's contribution. For example, a participant who contributed $75 each month for 24 months will be entitled to $225 each month in educational benefits for 24 months, while a member who contributed $50 each month for 15 months would receive $150 a month for 15 months. Unless the law is altered by Congress, members may not receive benefits in excess of three times their contributions.

Other features of the new law will:

- Discontinue the policy of providing prepayments before classes begin, except in cases of extreme hardship.
- Increase the maximum amount of money the VA can lend veterans for school costs from $600 to $1500 annually.
- Eliminate the five-point preference in federal employment for people entering military service, after Oct. 15, 1976.
- Remove completion date requirements for seriously disabled veterans enrolled in rehabilitation training.
- Establish the position of Assistant Secretary of Labor for Veterans Affairs.

Under the contributory program, participants who decide not to pursue additional education will be able to get a rebate of the amount they contributed.

The important points to remember are: the GI Bill educational benefits for people on active duty Dec. 31, 1976, or currently entitled to those benefits have not been eliminated, in fact they have been increased; and those who will be able to participate in the contributory program will have an opportunity to accumulate an educational fund (or savings account) while serving on active duty. ⚓

BENEFIT	TIME LIMIT (after separation)	WHERE TO APPLY
GI EDUCATION—The VA will pay you while you complete high school, go to college, learn a trade either on the job or in an apprenticeship program. Maximum is 45 months for those on active duty before Jan. 1, 1977. Time limit has not yet been set for personnel beginning tours after Jan. 1, 1977.	10 years from date of separation or Dec. 31, 1989 whichever is sooner for personnel on active duty before Jan. 1, 1977. Personnel separated before Dec. 31, 1966 are no longer eligible. Time limit not yet set for those entering after Jan. 1, 1977.	Any VA office
GI LOANS—The VA will guarantee your loan for the purchase of a home, mobile home or condominium.	No time limit	Any VA office
DISABILITY COMPENSATION—The VA pays compensation for disabilities incurred in or aggravated by military service. Payments are made from date of separation if claim filed within one year.	No time limit	Any VA office
MEDICAL CARE—The VA provides hospital care covering full range of medical services. Outpatient treatment is available for all service-connected conditions. Drug treatment is available for veterans in need of help for drug dependency.	No time limit	Any VA office or VA hospital
DENTAL TREATMENT—The VA provides dental care. The time limit does not apply for veterans with dental disabilities resulting from combat wounds or service injuries.	One year	Any VA office or VA hospital
GI INSURANCE—Low cost life insurance (up to $20,000) is available for veterans with service-connected disabilities. Veterans who are totally disabled may apply for a waiver of premiums on these policies.	One year from date of notice of VA disability rating	Any VA office
SGLI—Servicemen's Group Life Insurance may be continued with Veterans Group Life Insurance (VGLI); program became effective on Aug. 1, 1974.	120 days or up to one year if totally disabled	Information at any VA office
VGLI—Veterans Group Life Insurance may be converted to an individual policy with any participating company. Contact any VA office for list of companies.	Five years	Any participating company
EMPLOYMENT—Assistance is available in finding employment in private industry, in federal service and in local government.	No time limit	Local or state employment service, U. S. Civil Service Commission, any VA office
UNEMPLOYMENT COMPENSATION—The amount of benefits and payment varies among states. Apply immediately after separation.	Dependent on state or territory	Local or state employment service
REEMPLOYMENT — Apply to your former employer for employment. Usually limited to people who serve one tour only on active duty.	90 days	Employer

Dan Gallery Is Gone

But His Wit Lives On

"Daniel V. Gallery is a writer of humor and adventure who somehow got diverted into becoming an admiral of the line in the United States Navy."

—Herman Wouk in the introduction to Now, Hear This!

Retired Rear Admiral Daniel V. Gallery, the man who had millions around the world chuckling as they read his salt-encrusted sea stories, died January 16. He was 75.

During his lifetime, RAdm Gallery wrote eight books and numerous articles that combined his insight as a seasoned Navy veteran with a penchant for humor.

But the admiral's skill as an author was only one facet of his long and varied life. He wrote not only the funny tales of life at sea but also serious essays and commentary on various aspects of the need for a strong Navy.

He distinguished himself during World War II when, as commanding officer of the jeep aircraft carrier USS *Guadalcanal,* he pulled off the first boarding and capture at sea of an enemy naval vessel by the United States since 1815. Capture of the German submarine U-505 off the coast of Cape Blanco, French West Africa, provided the United States with intelligence information that allowed it to monitor and break coded German submarine transmissions during the remainder of the war.

As a humanitarian, Gallery organized the first little league on Puerto Rico while he was Commandant, 10th ND. Today, that little league organization includes 120 leagues around the island that have more than 11,000 youngsters playing the sport.

His interests ran to the musical as well. He founded the Navy's steel band after hearing oil drum beaters in Trinidad during carnival time.

RAdm Gallery first came to public attention in 1945 when his story describing the capture of the U-505 appeared in *The Saturday Evening Post.* He had to wait until the war ended before writing of the experience because it was necessary the Germans think their sub had been scuttled and had not fallen into our hands.

That article started his literary career; he contributed regularly to leading magazines afterwards.

Born July 10, 1901 in Chicago, Ill. (his father was a lawyer), he was appointed to the U. S. Naval Academy and was graduated in 1920, a member of the war-shortened class of 1921. While a midshipman, he was a member of the U. S. Olympic wrestling team and participated in the Olympic Games of 1920 held in Antwerp, Belgium.

Following graduation he spent seven years assigned to various afloat commands. In 1927, he won his wings.

Little League in Puerto Rico.

U. S. Navy Steel Band.

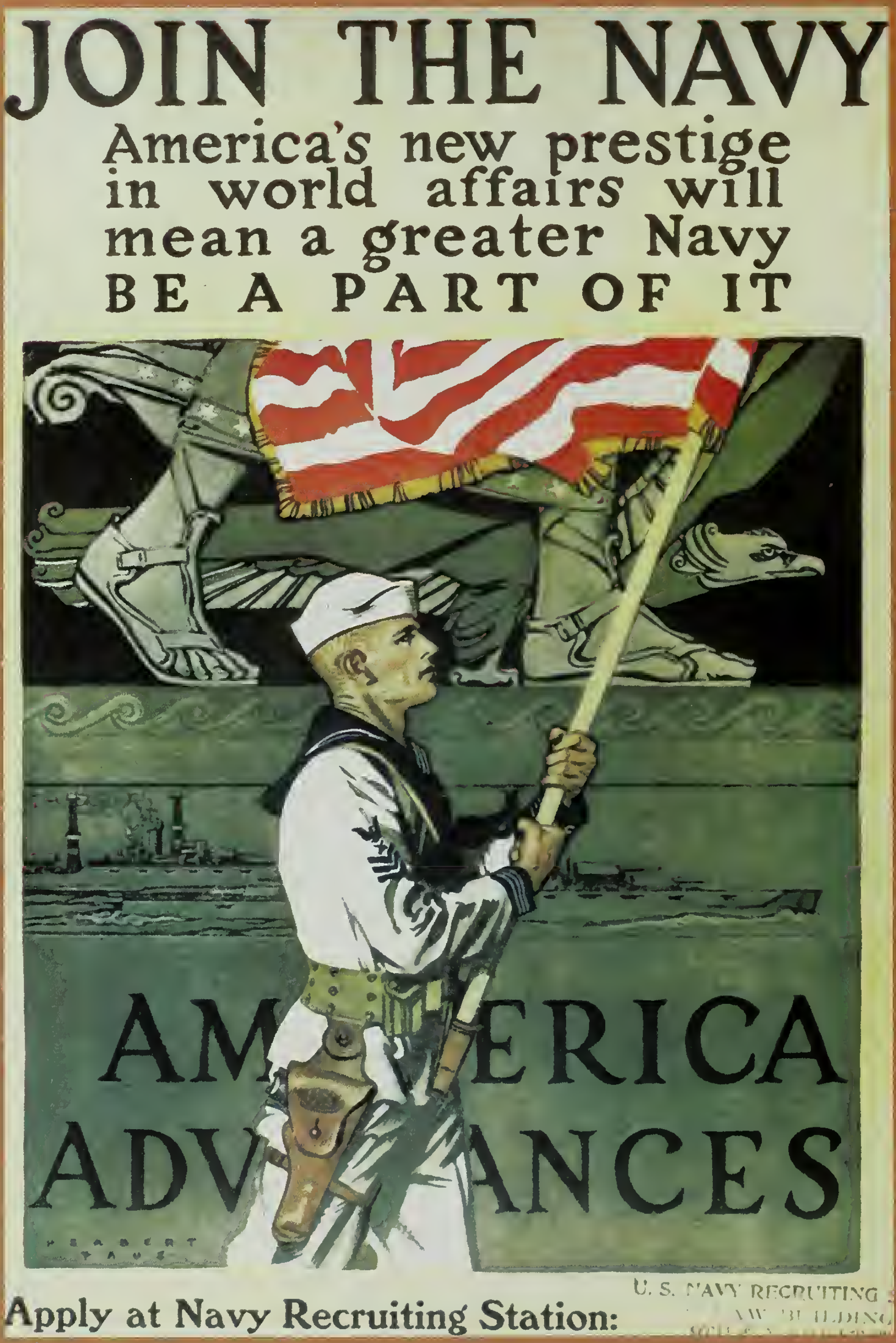
At the start of World War II, RAdm Gallery was commanding officer of the Fleet Air Base in Iceland. He later commanded USS *Guadalcanal* and USS *Hancock* (in 1945). With the coming of peace, he became Assistant Chief of Naval Operations (guided missiles) from 1946 to 1949. He also served as commander of the Naval Air Reserve Training Command at NAS Glenview, Ill.

Besides his eight books and many articles, the admiral wrote the preface to *John Paul Jones* by Samuel Eliot Morison.

He used humor to tell the Navy story and his books, among them, *Clear the Decks, Now, Hear This!* and *Eight Bells,* were printed not only in the U. S. but also in several foreign countries. In magazines, the byline "Dan Gallery" automatically meant an evening's good reading.

Two of his brothers, William and Philip (deceased), were also rear admirals and another brother, Rev. J. J. Gallery, served as a Navy chaplain. ⚓

Together We Win!


JOIN THE NAVY
America's new prestige in world affairs will mean a greater Navy
BE A PART OF IT
AMERICA ADVANCES
HERBERT PAUS
Apply at Navy Recruiting Station:
U. S. NAVY RECRUITING
BUILDING

They warned against loose lips, told how you could make history—not just read about it—and even made Mom's apple pie something worth fighting for. They became to the eye what a shouted command was to the ear—they were the posters of the war years.

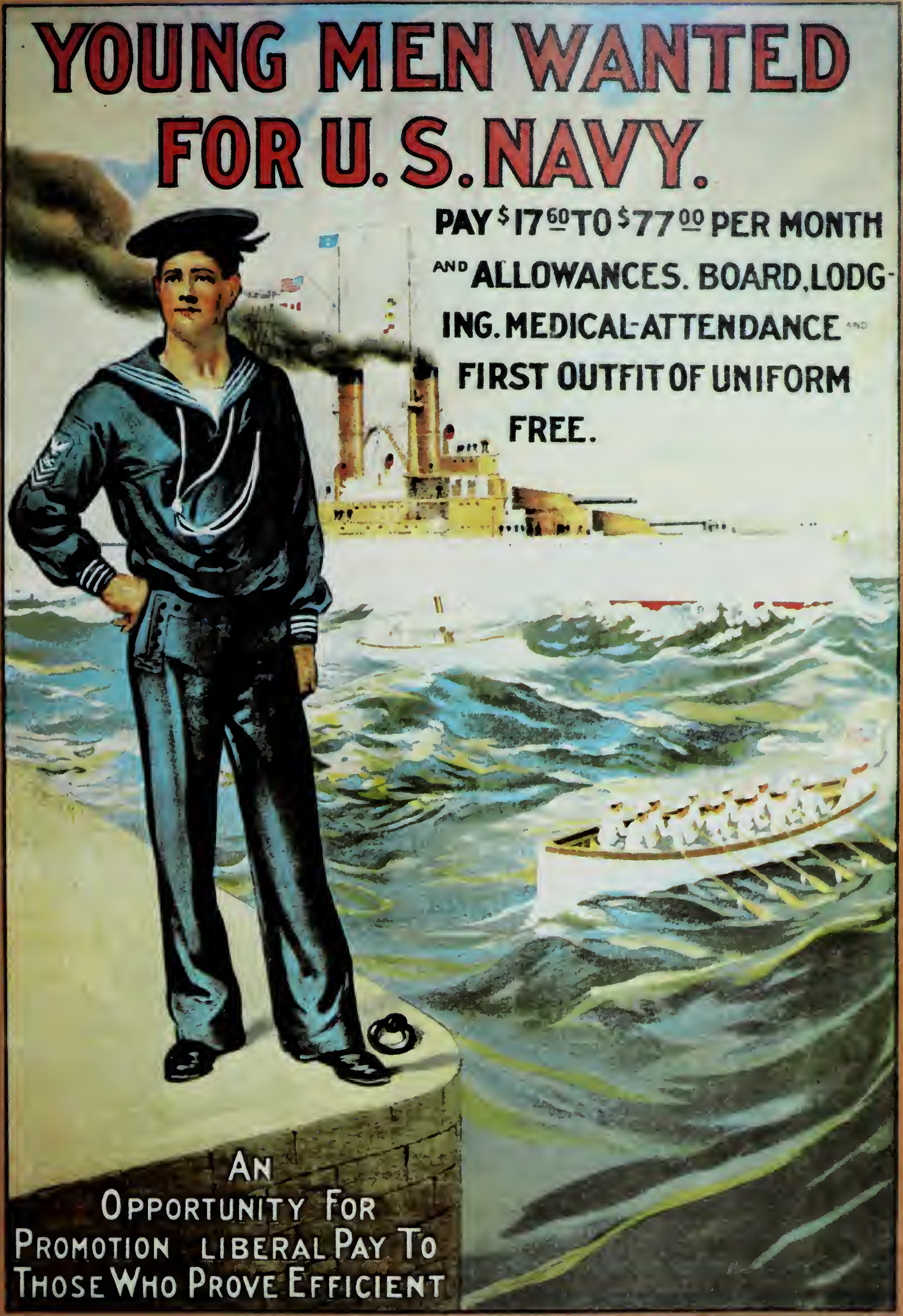
The Navy needed men, and women, ships and funds to operate during the peak of past war years so they advertised. Posters were cheap, easily distributed and could reach a large audience with dramatic and visually effective messages.

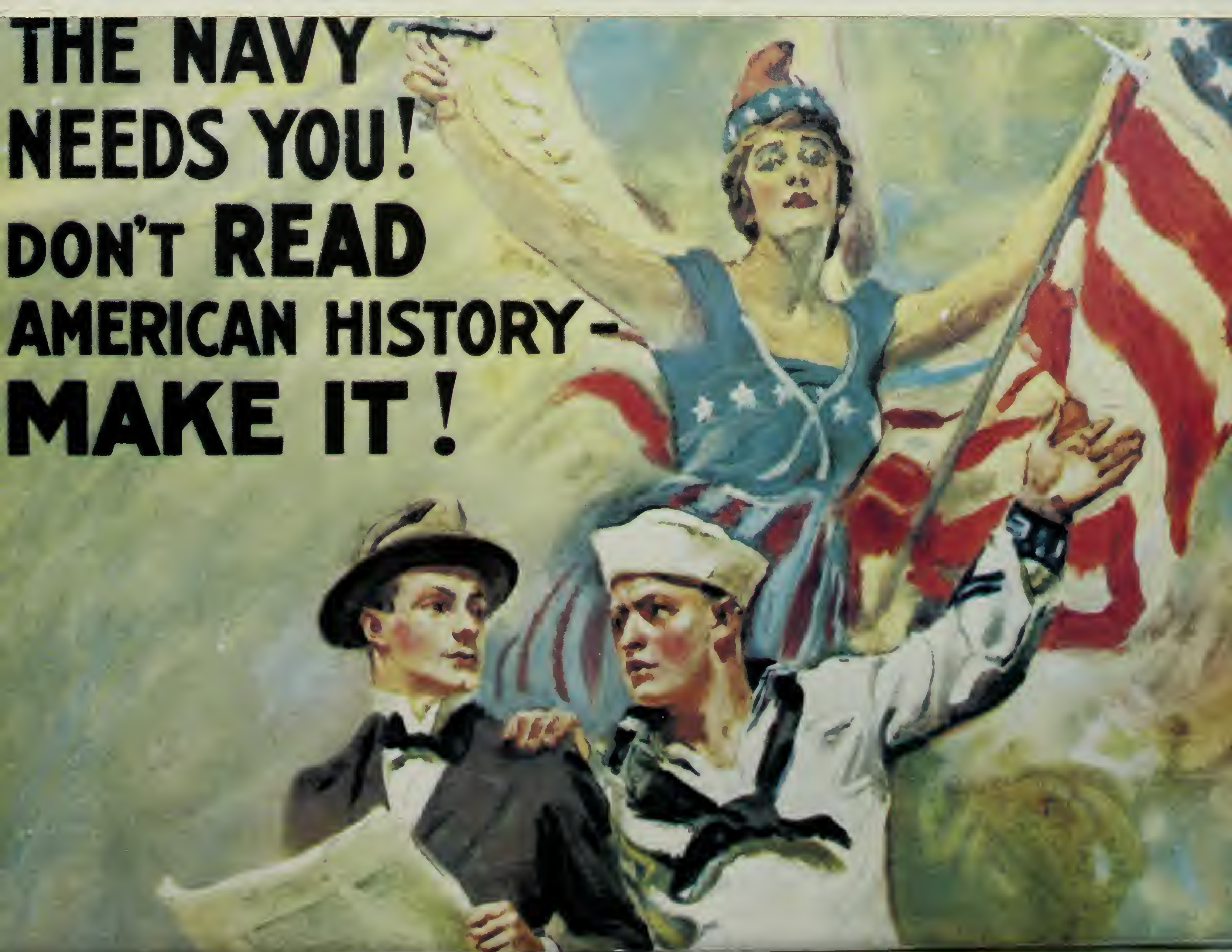
During World War I, Americans had to be convinced of the urgency and moral righteousness of the war. Emotional impact was registered by stereotyped heroes and villains shouting their messages in a forceful manner. There were blatant appeals to duty; God was invoked by both sides. Posters graphically espoused the ideals for which our boys "over there" were fighting the war to end all wars.

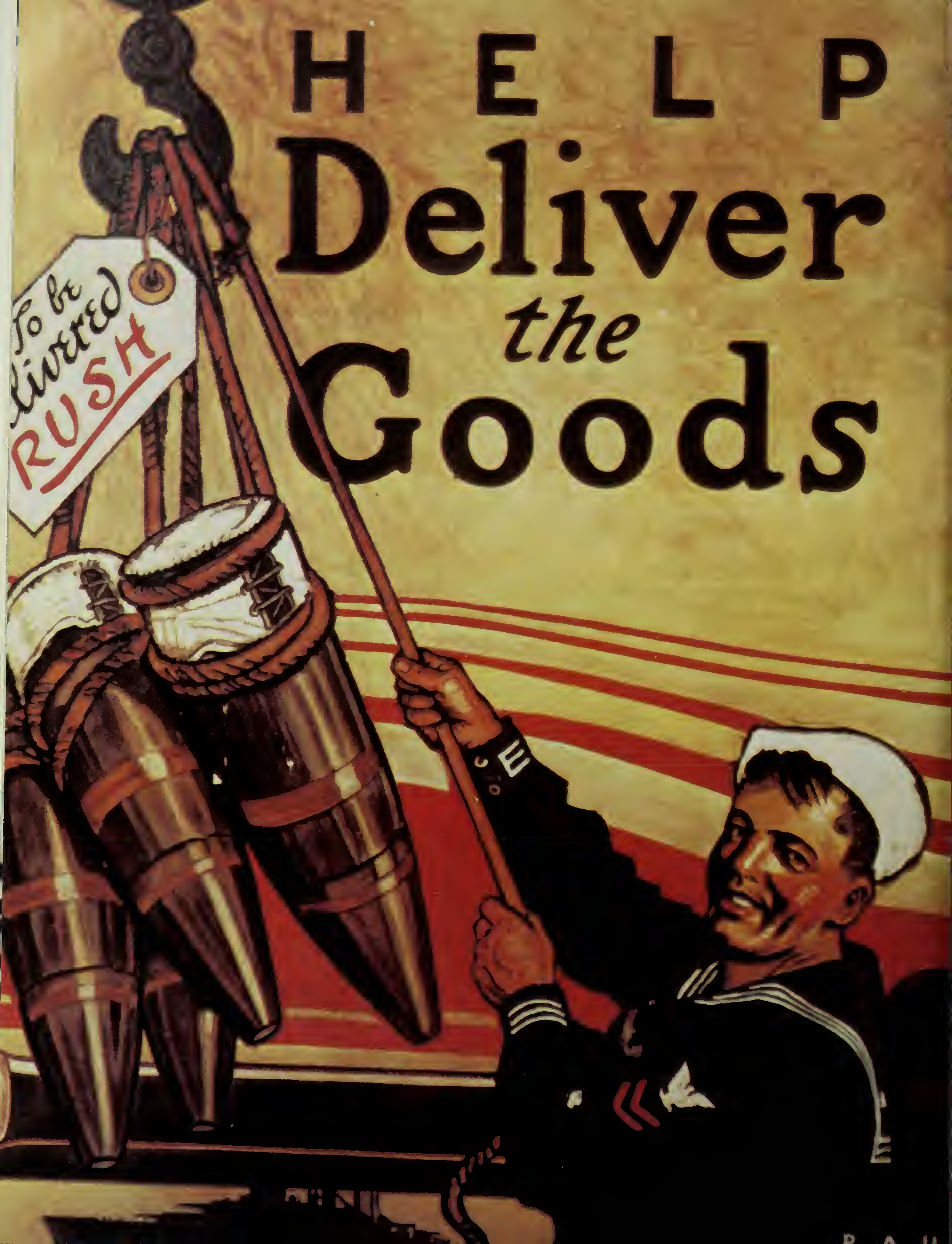
World War II was a different story. This time the reason for the fight was clear—Pearl Harbor.

Like their WWI counterparts, posters were still used to sell the needs of the country, but they attained an even more important purpose—that of visually interpreting the key events in Europe and the Pacific and not letting the country forget why the war was being fought.

With the end of WWII, the era of the "great war poster" died. The poster of the postwar years has since become a recruiting tool. The appeal to glory in battle has given way to emphasis on a career, a skill, travel and adventure. But, if the message has changed, the medium of the poster has remained a unique and attractive instrument of communication. ⚓


YOUNG MEN WANTED FOR U.S. NAVY.
PAY $17^{60} TO $77^{00} PER MONTH AND ALLOWANCES. BOARD, LODGING. MEDICAL-ATTENDANCE AND FIRST OUTFIT OF UNIFORM FREE.
AN OPPORTUNITY FOR PROMOTION LIBERAL PAY TO THOSE WHO PROVE EFFICIENT


THE NAVY
NEEDS YOU!
DON'T READ
AMERICAN HISTORY -
MAKE IT!


HELP
Deliver
the
Goods
To be
livered
RUSH
RAU

follow the Boys in Blue
for Home and Country

OUR EXPORT TRADE IS VITAL
BUY VICTORY BONDS

Proud to Fight!

We'll Finish the Job!

Secretary of the Navy
W. Graham Claytor, Jr.

The new Secretary of the Navy, W. Graham Claytor, Jr. was born in Roanoke, Va., March 14, 1912, the son of Graham and Gertrude Harris (Boatwright) Claytor.

Mr. Claytor received his Bachelor of Arts degree from the University of Virginia and is a graduate of the Harvard Law School, where he was president of the Harvard Law Review from 1935 to 1936.

After serving successively as Law Clerk to the late U. S. Court of Appeals Judge Learned Hand and to the late U. S. Supreme Court Justice Louis D. Brandeis, Mr. Claytor was admitted to the New York and District of Columbia bars. From 1938 to 1967 he was an associate and partner of thc firm Covington and Burling in Washington, D. C., with leave of absence for naval service in World War II.

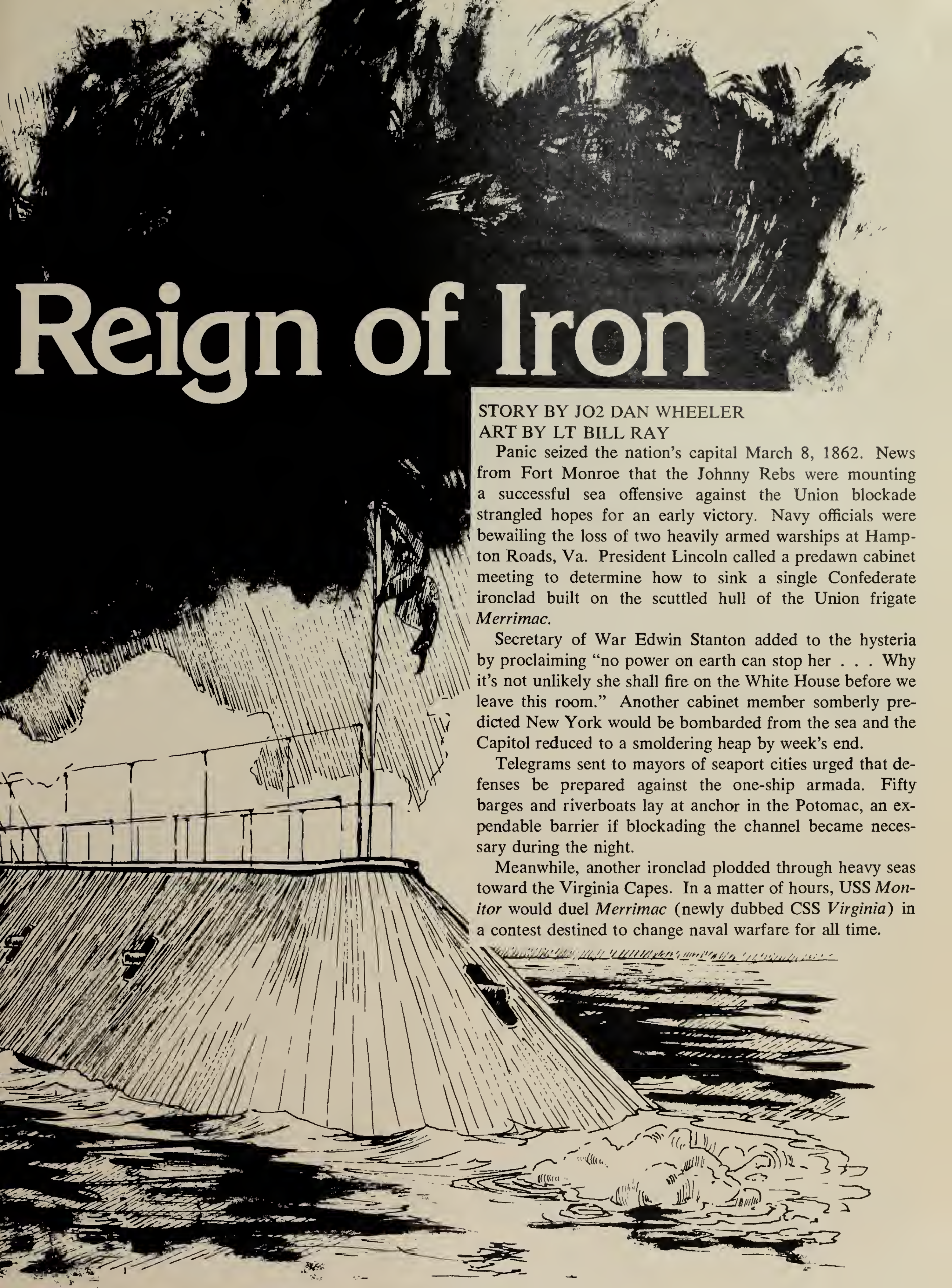
Entering the Navy as an ensign in 1941, he was promoted to lieutenant commander before release from active duty in 1946. During this period, he served as commanding officer of the submarine chaser USS *SC 516* (1942-1943), *Lee Fox* (DE 65) (1943-1944), and *Cecil J. Doyle* (DE 368) (1944-1945).

Secretary Claytor joined the Southern Railway System on Sept. 1, 1963, as vice president-law. He was elected president of the company Oct. 1, 1967, and chairman of the board last March 1.

The secretary also is a director of the Association of American Railroads, Florida East Coast Railway Company, Richmond, Fredericksburg and Potomac Railroad Company, Richmond-Washington Company, J. P. Morgan and Co., Morgan Guaranty Trust Co. of New York, and Penn Virginia Corp. of Philadelphia, Pa.

He is married to the former Frances Hammond. They have two children: a daughter, Murray and a son, Graham, III.

Mrs. Claytor was commissioned a Naval Reserve ensign in 1942 and served throughout World War II at the Eastern Sea Frontier Headquarters in New York. She was promoted to the rank of lieutenant commandcr before release from active duty in 1946. ⚓



Reign of Iron

STORY BY JO2 DAN WHEELER
ART BY LT BILL RAY

Panic seized the nation's capital March 8, 1862. News from Fort Monroe that the Johnny Rebs were mounting a successful sea offensive against the Union blockade strangled hopes for an early victory. Navy officials were bewailing the loss of two heavily armed warships at Hampton Roads, Va. President Lincoln called a predawn cabinet meeting to determine how to sink a single Confederate ironclad built on the scuttled hull of the Union frigate *Merrimac.*

Secretary of War Edwin Stanton added to the hysteria by proclaiming "no power on earth can stop her . . . Why it's not unlikely she shall fire on the White House before we leave this room." Another cabinet member somberly predicted New York would be bombarded from the sea and the Capitol reduced to a smoldering heap by week's end.

Telegrams sent to mayors of seaport cities urged that defenses be prepared against the one-ship armada. Fifty barges and riverboats lay at anchor in the Potomac, an expendable barrier if blockading the channel became necessary during the night.

Meanwhile, another ironclad plodded through heavy seas toward the Virginia Capes. In a matter of hours, USS *Monitor* would duel *Merrimac* (newly dubbed CSS *Virginia*) in a contest destined to change naval warfare for all time.

The story actually begins in early April 1861. Civil war was inevitable. Virginia, however, was uncertain whether to align with the Union or stand by her Southern sisters. As she wavered, Union officials feared that reinforcing the Norfolk Navy Yard's defenses or evacuating Union ships from its harbor would alienate the state. Yet, if Virginia seceded and nothing had been done, the port would definitely fall into Confederate hands. Clearly in a dilemma, they delayed until it was too late to save their stronghold.

Virginia seceded April 17 as a hostile mob was building outside Norfolk Navy Yard. The yard's commandant held out for three days. Then, fearing that Confederate troops were on the march, he hastily scuttled nine Union ships—including *Merrimac*—and abandoned the base. In the retreat, armament had been simply dumped into the sea or overlooked and ships only partially destroyed. When the rebels took the yard, they gained nearly 3000 pieces of ordnance and several repairable ships.

Early in the war, the Confederate Navy realized it would be unable to defend 3,549 miles of Southern coast if the Union Navy decided to attack or blockade Confederate ports. Although the war's victor wouldn't be determined by naval strength, the South needed sea control to import raw materials and munitions from Europe. Without the development of a superior class of ship, the Confederacy's newly conceived navy would be stillborn.

The Union Navy had problems too. The Confederacy simply couldn't be allowed freedom of the seas. The answer, of course, was a blockade. The question in Secretary of the Navy Gideon Welles' mind was, "How?"

When will they be ready for war?

Blockading a coastline stretching from Hampton Roads, Va., to Brownsville, Tex., would be the most monumental naval task ever undertaken. When news of Welles' "folly" leaked out, English naval officers laughed aloud. Not even the mighty Royal Navy would undertake such a "naval impossibility." The South, equally incredulous, called the plan "Lincoln's Soapbox Navy."

Welles, with only four Union ships at his disposal—the remainder strung out around the globe—began buying and arming everything from merchant clippers to tugboats. Ben Isherwood, a prominent engineer, was instructed to put engines "on anything that floats." And John Ericsson, a Swedish inventor, was given an open pocketbook to develop a fleet of superwarships.

In spite of obstacles, a blockade was soon effected. In response, the South (as well as the North) embarked on a scheme untried in the naval world—they each planned to build a fleet of ironclad warships.

The ironclad was not a new idea in naval weaponry. France had used several successfully during the Crimean War to attack fortresses from the sea. Ironclads had not been used, however, in ship-to-ship combat. A desperate South, ready to capitalize on any idea, began rebuilding the scuttled *Merrimac* and plating her sides with iron.

Original documentation of her conversion has been lost, but various accounts indicate that at 275 feet long, *Merrimac* was more than 100 feet longer than *Monitor*, and, at 23 feet, had more than twice *Monitor's* draft. Both had between four and five inches of iron plates surrounding their main decks, but *Merrimac* had 10 guns to *Monitor's* two. *Merrimac* had an iron sheet casement that sloped into the water at a 35-degree angle and was equipped with an iron ram. *Monitor*, equipped with the world's first revolving gun turret, was described by one Confederate as "looking like a cheesebox on a raft."

Neither side was able to keep its plan secret; the only question on the mind of each side was "When will they be ready for war?" A Union sympathizer working on *Merrimac* described Confederate progress in a letter to Welles and, as he later disclosed, this upset Union plans. "We, of course, felt great solicitude (about the Confederate success). When the contract for *Monitor* was drawn up, the Navy Department intended that she proceed to Norfolk and destroy both the dock and *Merrimac*. This was our secret . . . but weeks passed on and *Monitor* was not ready."

And then it was too late.

Merrimac steamed out of the navy yard early on March 8, 1862 for what spectators believed was a trial run. What else could it be? Her engines would only produce five knots, workmen were still putting on the finishing touches, and her crew was wholly untrained for the vessel. Yet despite all this, *Merrimac's* Captain Franklin Buchanan and two gunboats were steering a course for Hampton Roads where two Union ships lay at anchor. His intention was to destroy those ships, *Congress* and *Cumberland*, engage three others nearby (*Roanoke, St. Lawrence* and *Minnesota*) and break the blockade.

One Southern newspaper reported, "Buchanan has confidence in *Merrimac* and says he is either going to glory or a grave in her. Lieutenant Catesby Jones, second in command, is less confident, but he says she is as good a place to die in as a man could have."

Two days earlier, *Monitor* had left the yards in New York en route for Virginia.

The blockade had been effective for nearly a year without serious Confederate intervention. Onboard *Cumberland*, crewmembers were hanging out their wash in the rigging when Lieutenant G. U. Morris, acting captain, first noticed a "huge, half-submerged crocodile" accompanied by two gunboats heading upriver.

General quarters sounded and *Cumberland* fired when *Merrimac* was three-quarters of a mile distant. "Still she came on," recalled *Cumberland's* pilot, "our balls bouncing off her mailed sides like India rubber. We had probably fired six or eight broadsides when a shot was received from one of her guns which killed five of our Marines. It was impossible for our vessel to get out of her way or stop

LT S. Dana Greene, executive officer of USS Monitor, took command of Monitor when her captain was temporarily blinded by enemy fire. Under Greene's command, Monitor was able to prevent a Southern break in the Union blockade, but he was later criticized for not chasing Merrimac into the yards at battle's end.

her, and *Merrimac* soon crushed her iron horn into *Cumberland* knocking a great hole in the side."

Even as she sank, *Cumberland* continued to fire on *Merrimac.* A correspondent reported, "*Cumberland's* crew worked desperately amid the din and horror of the conflict, and gave cheers for their flag though the decks were slippery with blood, and arms, legs and chunks of flesh strewed about."

Merrimac then turned her guns on *Congress.* Each Confederate volley destroyed another Union gun, set yet another fire, or killed another gun crew.

"Seeing that our men were being killed without prospect of any relief from *Minnesota* (which had run aground)," reported *Congress'* executive officer, "and not being able to bring a single gun to bear on the enemy, we deemed it proper to haul down our colors without further loss of life."

Buchanan ordered his gunboats alongside *Congress* to receive her surrender. As they approached to board, a barrage from Union shore batteries forced them back. Sure that the fire had come from *Congress,* Buchanan climbed out of *Merrimac's* casement in rage and was immediately shot in the thigh.

A correspondent at the shore battery reported that one Northern soldier at the attacking battery had asked his commanding general, "Sir, since the *Congress* has surrendered, has not the enemy the right to take possession?" The general snapped back, "I know the damned ship has surrendered, but we haven't!"

Unable to board *Congress, Merrimac* sprayed her with red hot shot. (She burned until around midnight, then exploded and sank). *Merrimac* then fired several volleys at *Minnesota* and retreated for the night, planning to return at first light to finish off the remaining Union vessels.

The South had won decisively. Their combined guns totaled 27 against 300 of the enemy's, 100 of which could be brought into action at every moment and on every point. *Merrimac's* armor was barely dented. All told, *Cumberland* lost 121 men; *Congress,* 136; and the Confederate force only 20.

The Baltimore American reported, "The day closed dismally for our side and with the most gloomy apprehension of what would occur the next day . . . There appeared no reason why the iron monster might not clear the Roads of our fleet." *Minnesota* was still hard aground and badly damaged, and, because of their deep drafts, *Roanoke* and *St. Lawrence* couldn't get within range.

During the night, however, *Monitor* arrived and anchored near *Minnesota.* Her crewmen were weary from two days of hard travel in heavy seas and from fighting to keep the Union ironclad afloat due to serious defects hampering her seaworthiness. Throughout the night, while *Merrimac's* crew relaxed and rejoiced, *Monitor's* crew prepared for combat.

Merrimac returned the next morning, Sunday, March 9. According to one Navy doctor who watched from shore, "David goes out to meet Goliath. Every man who can walk to the beach sits down there—spectators of the first ironclad battle in history."

Merrimac fired on *Minnesota* as soon as she was in range. Immediately, *Monitor* emerged from the shadows. One *Merrimac* sailor remarked, *"Minnesota's* crew is leaving her on a raft." Soon, however, all realized that the "raft" was Ericsson's ship—"an immense shingle floating in the water, with a gigantic cheesebox rising from its center."

Sizing each other up, the ironclads passed on opposite courses; turned and passed again. According to one account, Lieutenant John Worden, *Monitor's* captain, "steered directly for the enemy's vessel in order to meet and engage her as far as possible from *Minnesota. Merrimac* had already begun firing and when Worden came within short range, he gave the order, 'Commence firing'."

With *Monitor's* first shot from guns concealed within the turret, one of the rebels shouted, "Damn it, the thing is full of guns!" *Merrimac* then launched broadsides at *Monitor.* S. Dana Greene, *Monitor's* executive officer, related, "The fight continued as fast as the guns could be served and at very short range . . . Our shots ripped into the iron of *Merrimac* while reverberations of her shot against our turret caused anything but a pleasant sensation."

The ironclads continued to square off and exchange volleys for the better part of the morning without noticeable effect on either. According to one of *Merrimac's* crew, "More than two hours had passed and we had made no impression on the enemy as far as we could discover . . . Several times *Monitor* ceased firing and we were in hopes she was disabled, but heavy blows from her guns soon undeceived us . . ."

At one point, *Merrimac* ceased firing herself and her captain inquired of his chief gunner as to the trouble. "No trouble sir," he replied. "After two hours of incessant firing, I find that I can do her about as much damage by snapping my thumb every two minutes as firing at her!"

Around 10 a.m., *Monitor* retreated to shallow water to reload her turret. *Merrimac* immediately directed her fire on *Minnesota. Minnesota's* captain wrote in a later report, *"Merrimac,* finding she could do nothing to *Monitor,* turned her attention to me. I opened upon her with all my broadside guns—a broadside which could have blown out of the water any timber-built ship in the world—and at least 50 shot hit her without producing any apparent effect."

Monitor soon returned and the battle continued. They fought like two ironclad gladiators standing toe to toe in an arena swinging broadswords. About noon, *Monitor* again ventured into shallow water to reload. With the tide ebbing and *Monitor* out of reach, *Merrimac* withdrew from the battle and returned to the yards.

They fought like two gladiators swinging broadswords.

It was over. Both sides claimed victory. (Historians generally agree it was actually a draw, yet armchair strategists continue to fight the battle to this day.)

The battle had proven conclusively that wooden ships were obsolete in naval warfare by virtue of the fact that they were helpless when confronting a ship of iron. This pronouncement was felt worldwide in naval circles. Shortly afterwards, the conservative London Times reported,

"Whereas we (England) had available for immediate purposes 149 first class warships, we now have two . . . There is not now a ship in the Royal Navy, apart from these two (English) ironclads, that could be entrusted to an engagement with that little *Monitor*.

Merrimac made two more appearances in the Roads, but never again fought a Union ship. She did, however, continue to be a deterrent against any Union attempt to transport troops inland by way of Virginia's waterways.

On May 10, 1862 the Confederates abandoned Norfolk under fire and, unable to take *Merrimac* into shallow rivers, put the torch to their ironclad. Six months later, *Monitor* sank while in tow off Cape Hatteras.

Although *Monitor* and *Merrimac* both were destroyed after brief service, their contribution to naval warfare cannot be overestimated. Their one encounter with each other in Hampton Roads had begun what Rear Admiral John A. Dahlgren labeled "The reign of iron . . ." ⚓

Bearings

'Mini' Leaves, Finally

It seems no matter how hard you try there are some people you just can't do a favor—and that seems to go for sharks, too.

Take the case of Mini the two-ton whale shark trapped in the lagoon at Canton Island, an atoll 1900 miles southwest of Hawaii. The 36 U. S. Air Force-employed civilians, working as caretakers of the atoll's facilities, feared for her well-being.

Sure, Mini was friendly enough as sharks go, allowing the residents to hitch rides on her huge dorsal or pectoral fins. She particularly seemed to enjoy being petted.

But people on the island thought perhaps she wasn't getting enough to eat. There was also concern that she may have been depleting the lagoon's fauna. What to do?

After a year of unsuccessful attempts to lead the huge fish out of the lagoon, the people on Canton Island decided it was time for a little outside help. The help, which included members of Navy Explosive Ordnance Demolition Team One, a Navy marine trainer from the Naval Underwater Center, and a civilian aquarium director, arrived in Canton and began plotting the rescue of the docile fish, ensuring, too, the safety of the reef's ecology.

The joint team discovered a dead coral reef—75 feet across—could be blasted out and not pose a danger to either Mini or other lagoon inhabitants. The charges were set and an escape route blown through the lagoon. But, Mini, who had come to enjoy her lagoon home, didn't want to leave.

All manner of enticements were dangled in front of her. No dice. They tried to tow her with a line around her fin. She didn't like that at all. One diver tried guiding her by covering first one eye, then another. Mini enjoyed these "games"—as long as she stayed in the lagoon.

The decision was made that since she now had an avenue of escape she would leave when she was ready.

Mini took an awfully long time deciding if she was ready. But one day, more than a month after the channel had been blasted, Mini hesitantly stuck her nose into the open ocean, obviously liked what she saw, and languidly swam out of the lagoon and away from Canton Island.

Mission complete . . . finally.

Women in Sports

One of the pleasant discoveries to come out of the first class of women to attend the Naval Academy is their prowess at sports.

Already this year the girls have:

- Put together a volleyball team that went undefeated in season play, then went on to win the B Division of the Maryland State College Volleyball Championship.

- Come up with a woman member of the plebe dinghy sailing team that won the Mid-Atlantic Association of Women Sailors Intercollegiate Championship against seven other varsity teams.
- Established a Navy women's fencing team that won its first match against the tough William & Mary team. The Navywomen—who had been fencing for only five months—beat a team that had two or three years' fencing experience.

Those are only fall sports. There's no telling what spring competition will have to offer. Or, for that matter, several years from now when there will be women in every class at the Academy.

Oil Spill Anatomy

Navy divers recently completed what may have been the first underwater photography of an open ocean oil spill.

At the request of scientists from the National Oceanic and Atmospheric Administration (NOAA), four U. S. Navy underwater photographers were sent to the scene of the *Argo Merchant* oil spill 27 miles northeast of Nantucket off the coast of Massachusetts.

Working in conjunction with NOAA scientists, the Coast Guard and the Bureau of Land Management, the Navy team sought to get photographic evidence of what many scientists had only previously theorized about traits of oil dumped in the sea.

Specifically, scientists wanted to know what the underside of the large, thick pancake of oil looked like. Did it have long stalactite-like streamers hanging from it, thereby increasing its drag as it moved across the water surface? Did it clump into globs?

The 7.6 million gallons of industrial oil dumped from the Liberian-flag tanker *Argo Merchant* in mid-December gave the underwater photographers an opportunity to answer some of those questions.

When the sea conditions were right, two team members made a shallow dive under the two-inch thick oil, and a deeper, 140-foot dive to the ocean bottom, within a half-mile of the wreckage of the tanker.

The two divers, working in 40-degree water saw that the underside of the slick looked like the surface side; that it did not have a "keel" or streamers hanging from it. The divers also saw that although there was no sign of oil on the bottom, there were also no fish in the area.

An abrupt change in sea conditions forced the divers to surface through the oil. With the black guck dripping from their hair and beards, the divers came aboard the Coast Guard cutter *Vigilant.* They tried hand cleansers and strong detergents to clean off the oil—with no luck. Then, one of the attending Coast Guardsmen suggested using a green shaving gel.

It did the trick, cutting through the oil and cleaning hair and beards. This led some to speculate that it might work with equal results on many of the sea gulls and other fowl trapped in the slick.

The oil removed, the Navy photographers handed in their motion pictures and photographs. NOAA officials processed and viewed the film and declared it "excellent" for their scientific studies. Just another first of sorts for Navy divers and photographers who do it all in a day's work.

Bearings

'Purely for Enjoyment'

Whether it was sewing ripped sails or mending torn trousers, splicing ankle-thick lines or executing intricate knot work, the evolution of the boatswain's mate has traditionally been tied to some form of needle and thread.

For those who thought boatswain's mates had already done just about everything one can do with rope, line or thread, meet Boatswain's Mate 2nd Class Lonnie McKenzie.

Lonnie, you see, does embroidery for a hobby.

"I'll do any kind of pattern—initials, animals, horoscope signs, sunrise, insects, leaves, anything. Just put it down on paper and I'll do it," the USS *Vancouver* (LPD 2) crewman said.

Why does a burly boatswain's mate take up what is customarily considered a woman's task?

"For enjoyment, purely for enjoyment," he said. "It's like reading a good book; it helps me to relax."

Lonnie picked up his hobby about a year ago from, appropriately perhaps, his hometown sweetheart.

"Every time I went to her place, she was embroidering something. One day she asked me if I would like to try. I nearly fell flat on my face. But I'll try anything once. So I did and after a week, I finished a pattern; I liked it," he said.

Nowadays, when Lonnie goes to sea, he passes the time with needle and thread and his latest pattern.

His shipmates admire his skill and frequently come forward with requests. "When I wear my embroidered shirts ashore, I get all sorts of good comments too," Lonnie said.

"If a woman can whittle wood, why can't a man embroider?" Lonnie asked.

Quick Credit for Drills

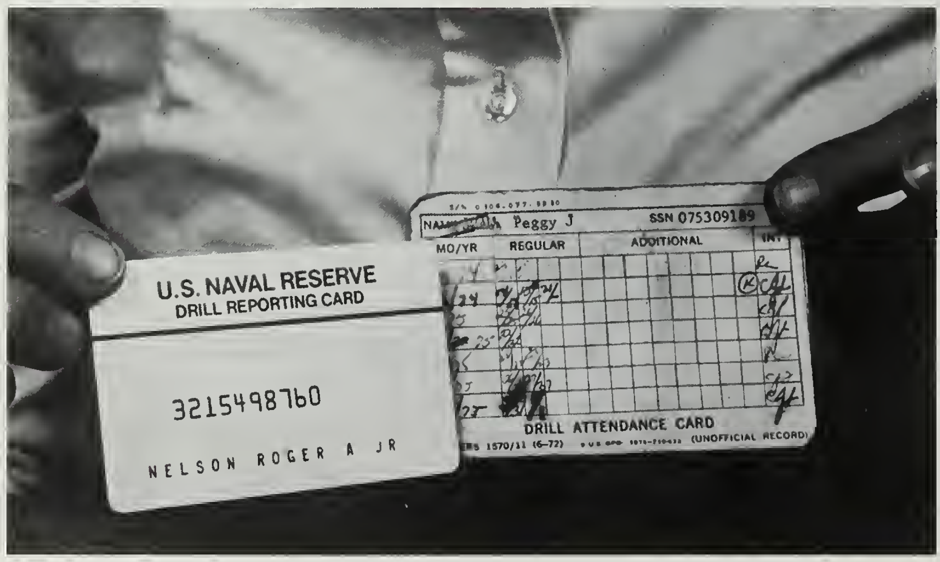
Beginning in the spring of 1977, drilling Naval Reservists recording their drill credit will be able to say "charge it" . . . well, sort of.

Actually, a new "credit" card for Reservists, called RESFIRST (Reserve Field Reporting System), will replace the often tattered card currently used for recording drill credits.

The Reservist will present his plastic card at each meeting where it will be stamped onto a prepared form. One copy will go to the member for his records and another forwarded to the Naval Reserve Personnel Center in New Orleans, La.

The big advantage of RESFIRST is that Reservists will receive their pay checks at least a month earlier than under the old system. Additionally, the new system will provide statistical information necessary for more effective management of Reserve drill pay funds.

Think of it—money instead of a bill simply by using a credit card. Now if only the gas companies and the banks could be persuaded to use the Navy's RESFIRST credit card program. . . .



Sara's Autographs

It all started when a father decided to visit his son.

Penn State Assistant Head Football Coach Jim O'Hora was in Jacksonville, Fla., with his Nittany Lions team to meet (and be defeated by) the Fighting Irish of Notre Dame in the annual Gator Bowl classic.

Coach O'Hora brought the team to USS *Saratoga* (CV 60) where his son, Lieutenant Jim O'Hora is assigned as the landing signal officer.

After Head Coach Joe Paterno presented *Saratoga's* commanding officer an autographed football, athletes and coaches watched Navy A-7s from nearby Cecil Field perform simulated landings using the ship's mirror landing system. The Penn State marching band, 200-strong, paid a subsequent visit, and joined the crew for dinner on the mess decks.

But wait, the story isn't over yet.

Not long after the Penn State crowd departed, who should show up at the *Saratoga's* quarterdeck but another team. You guessed it, the Fighting Irish had come to call.

After a tour of the ship the Notre Dame team and coaching staff settled down to watch videotaped replays of carrier catapult launches and arrested landings on closed circuit television. Notre Dame's Assistant Head Coach Ed "Moose" Krause presented another autographed football for *Saratoga's* growing collection.

It obviously was an eye-opener for many of the visitors. As one Penn State majorette said, "Before this, I thought the Air Force did all your flying."

Forget that 29-9 Gator Bowl score —instead, score one for the Gipper, one for the Lions, one for the Navy and zero for the Air Force.

Busy Mount Baker

USS *Mount Baker* (AE 34), recently conducted what can best be described as "other than normal" at-sea operations.

First, as an exercise to demonstrate the flexibility of mobile logistic support forces, the ammunition ship successfully executed the rarely practiced method of astern refueling. For a method that's rarely practiced, *Mount Baker* didn't do badly at all, as the receiving ship signaled "not a drop spilled."

But the break in routine didn't stop there. On another occasion, *Mount Baker* found herself in the unaccustomed role of medical treatment center and ambulance.

It happened like this. While steaming 375 miles east of her Charleston, S.C., home port, the ship picked up the signal of an Italian tanker that had rescued an injured mariner from a 40-foot yacht during heavy weather.

Mount Baker, having medical personnel assigned, quickly volunteered to bring the injured man aboard. He was subsequently evacuated ashore by a Coast Guard helicopter.

Whether delivering ordnance, oil or casualties, *Mount Baker* apparently likes to abide by her motto: "We deliver with class—any time."

Information Exchange

Q. *A group of officers and chief petty officers in red coveralls came aboard my ship a week ago conducting a safety survey. What is a safety survey?*

A. The Naval Safety Center, located in Norfolk, has a team of officers and CPOs which visits ships to conduct safety surveys. The purpose of the survey is to carefully examine your ship to discover potentially dangerous areas or practices. Identifying these hazards before an accident occurs enables a ship to take corrective action to prevent an accident or personal injury. Safety surveys are made only upon request. Reports on follow-up action are not required.

Q. *I was not selected for PNC by last year's CPO Selection Board while another PN1 at my command was selected even though his final multiple score was seven points lower than mine. How can that happen?*

A. It should be emphasized that the final multiple score (FMS) is only a means for determining selection board eligibility. Although standard scores achieved on advancement examinations are provided to the selection board, FMS totals are not. Therefore, based on a thorough review of all candidates' records within a rating, a member with a lower FMS, but with an extremely strong performance record, may be selected.

Q. *Where does the Navy Motion Picture Service get its movies and how many does it procure per year?*

A. The Navy Motion Picture Service (NMPS) screens and selects motion pictures from all sources, including all major motion picture companies and many independent companies. NMPS' aim is to procure the latest and best entertainment possible. The procurement goal is four new films per week in order to provide shipment of 208 new films per year. It is not always possible to attain this goal due to the scarcity at times of good quality films. Procurement includes sports, classic films and kiddie shows.

Q. *Does the military still have R & R facilities in Hawaii?*

A. Yes. R & R facilities include the Kilauea Military Camp on the big island of Hawaii and the Bellows Beach Recreation area on Oahu. The Armed Forces Recreation Center, the Hale Koa Hotel, was opened in October 1975. The 15-story, 416-room facility is located in the center of the Waikiki tourist area at Fort DeRussy. Navy personnel, both active and retired, may make reservations and can receive further information by addressing your inquiry to: Hale Koa Hotel, 2055 Kalia Road, Honolulu, Hawaii 96815.

Q. *My son and I are both veterans receiving GI Bill benefits. Since my son is under 23 and living at home, can I claim him as a dependent, thereby increasing the amount of my benefits?*

A. Yes. The dependent's own service does not constitute a bar to payment to veterans of increased educational assistance payments.

Q. *My first home was purchased with a GI loan. I am now selling. May a purchaser assume my GI loan?*

A. Yes. However, if a purchaser assumes your loan, you should obtain a release of liability from the VA in order to avoid any financial liability in case the buyer defaults on mortgage payments. You should remember that if a purchaser assumes your GI loan your entitlement is not restorable unless he is an eligible veteran willing to substitute his entitlement for yours. Of course, your entitlement can also be restored if your GI loan is paid in full.

Q. *I heard that retired military personnel and active duty members on leave could take cruises on Military Sealift Command (MSC) ships. I'd like more information on this.*

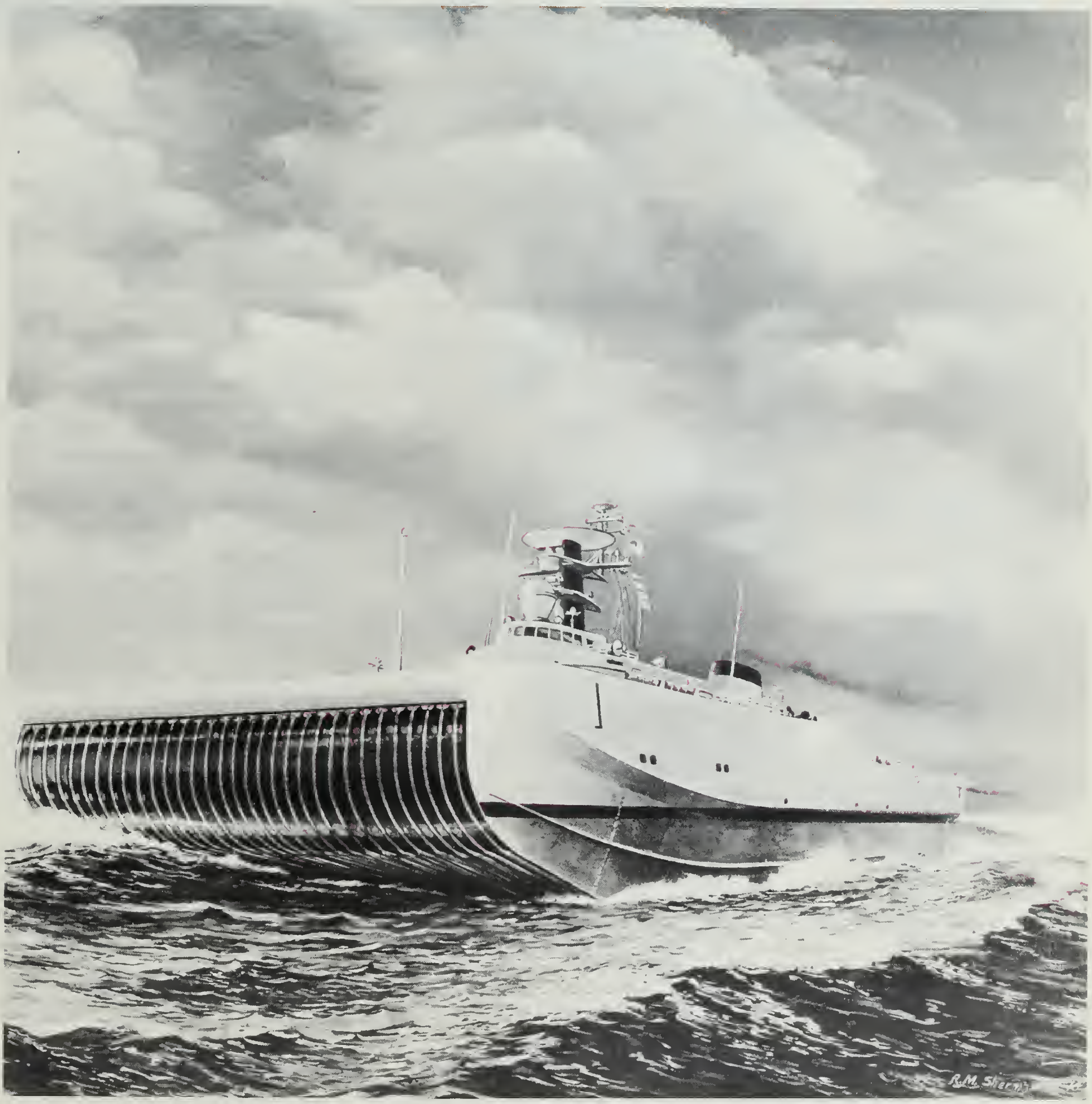
A. Military Sealift Command no longer offers this service. MSC once operated 60 troopships but all have been disposed of or are in the reserve or mothball fleet. Cargo ships, tankers and other vessels MSC operates do not have facilities for passengers and they do not operate on scheduled routes.

Q. *It seems that the Navy Campus for Achievement (NCFA) is concerned only with college degrees and programs. What about Navy people who have a personal interest in off-duty vocational and technical development?*

A. The Navy Campus for Achievement offers much more than college-degree programs. The NCFA gives higher priority to tuition assistance for vocational and technical courses than it does for college degrees as such. Tuition assistance will be approved for vocational and technical courses taken at public institutions and at accredited private institutions.

The NCFA looks with particular favor upon off-duty vocational and technical courses which are rating related. It should also be noted that most of the NCFA colleges offer a variety of vocational and technical certificates which can be completed in less than two years. In other words, a Navy person can sign an NCFA letter of agreement with one of these colleges for a vocational or technical certificate instead of a college degree. ⚓

Ship of the Future



Artist's version of the U. S. Navy's 3000-ton surface effect ship (3KSES), for which a contract has been let. This SES will be 270 feet long and 105 feet wide. It will be powered by gas turbine engines capable of maintaining speeds three times faster than conventional ships. The ship can attain such speeds because it rides on a cushion of air that keeps most of its bulk out of the water. Potential missions include antisubmarine, antiair and antisurface warfare, tactical and air support, and amphibious assault.

The High Cost of

JO1 JERRY ATCHISON

The first users of credit in America—the Pilgrims—took out a seven-year loan to finance their trip to the new world. They set an unfortunate precedent, however, that some Navy men and women have copied:

It took the pilgrims 25 years to pay off that seven-year loan.

Every year, Navy people who can't or won't pay their just debts find they face possible disciplinary action that could include discharge from the service. Some are frankly ignoring their debts. The majority though, find themselves in real money trouble because they didn't understand what they were getting into.

Some think when they buy something on credit they are simply paying little by little for the early use of the merchandise. True in a way. But it is also true that in every case they will pay some amount over the cost of the merchandise just for the privilege of using another person's money.

The cost of using this money is what some people fail to plan for and, therefore, end up not being able to afford. Whatever that cost is called—be it interest, carrying charges, service or finance charges—it can be a major expense that one should know and plan for before contracting for credit.

This is especially true when you realize that the unique circumstances of military men and women can distinctly influence their credit situation. For instance since military families have steady incomes, they may be special targets for some types of credit business.

Debt and Credit

Also, businessmen know that commanders can, under certain circumstances, take actions affecting the career of a Navy person who encounters credit problems.

And finally, credit businesses know that military families are often seeking credit because frequent transfers also mean establishing or maintaining good credit in each new community.

How does all this affect the military family seeking credit? What is the opinion of credit managers regarding the credit worthiness of these people? Is it easier or harder for people in the service to get credit?

These and other questions prompted All Hands to conduct an informal poll of credit-granting establishments in the Washington, D. C. area—an area with a major concentration of military. Here are excerpts from those conversations:

A credit manager from a furniture store across the street from a large base: "Sometimes it takes a bit longer to process and approve credit applications from military people because many of their credit references are from out of town.

". . . The younger enlisted people in the lower pay grades often don't understand the conditions of the contract they are contemplating signing. We take the time to explain the contract and also tell them that, in any event, they should go over the contract with their base legal officer. . . .

"We comply with the Department of Defense Standards of Fairness and therefore keep on hand Certificates of Compliance required by those standards. But when we tell military people that, you'd be surprised at the number who either don't know what we're talking about or care that they've got the right to have it filled out before a contract is signed."

A loan officer at a metropolitan bank: "We get some military people in here who are very knowledgeable about credit. One told me that his command had credit and debt workshops where one could learn about

NEW AUTO $65.00 mo.
AUTO INSURANCE $195.00 yr.
STATE TAX $120.00 yr.
LICENSE $25.00 yr.
CITY TAGS $15.00 yr.
AUTO SALE
CREDIT AVAILABLE

The High Cost of Debt and

such things as the Truth in Lending Act, the Fair Credit Reporting Act and others. I think that's a pretty good idea.

"Everyone knows that when they move across country, their household effects go with them. What some don't know is that their credit rating—good or bad—goes right along also. Occasionally we'll get a military credit applicant who looks fine on paper. But when we get a history of his previous duty stations and run credit checks in those areas we sometimes find some surprising things. It is almost always a situation where the member got into credit trouble when he was young. And even though his credit habits had changed over the years, he felt it safe just to ignore a debt he'd contracted years before and a continent away. The system doesn't work that way."

A department store credit manager: "We had a young married couple come in here one time. He was an Air Force E-3; she had a low-paying clerical job. They did not qualify for an account with the store. Their income was too low. They had lived in the area only a short time and had no established credit references.

"But I granted them a limited line of credit on the basis of their attitude. They questioned almost every line of the credit contract and did not go on until they were sure they understood what they'd read. They discussed how, because of their limited income, the account could only be used for necessities that would be paid off by payday. They recognized that while they might be able to afford paying for the purchases, there was no room in their tight budget for finance charges each month. Finally, before they signed the contract they took a copy to their base legal officer and, as they told me upon their return, went through the same thing with him.

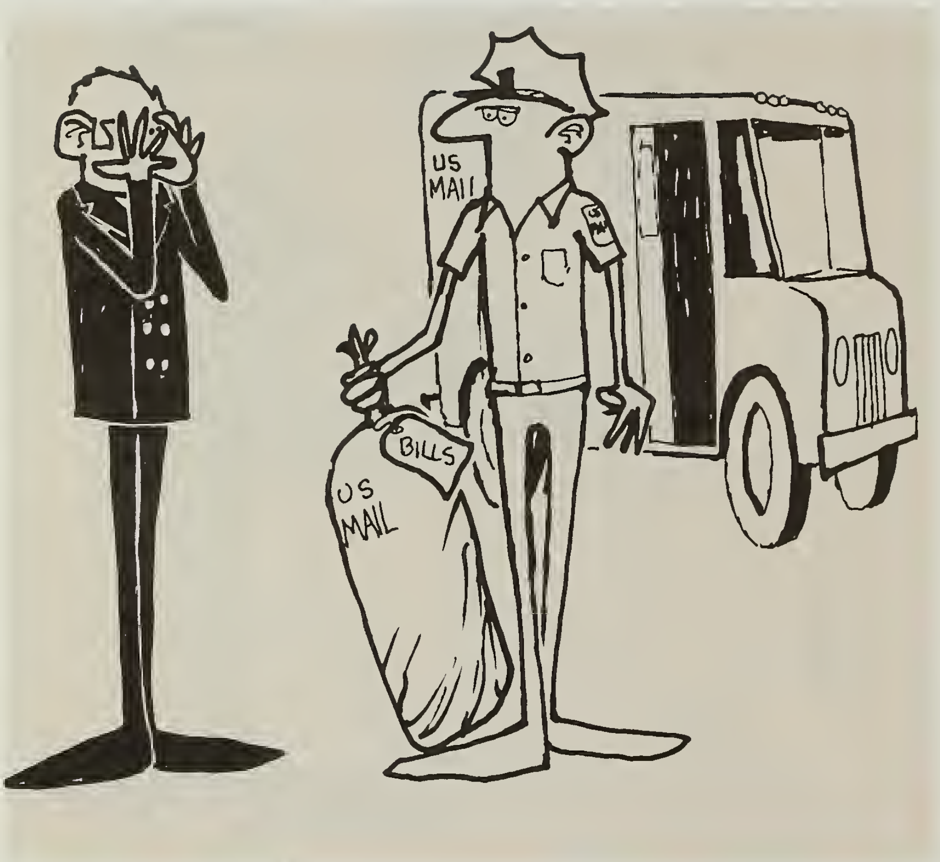
"That young couple entered into a credit agreement with their eyes wide open. If all our customers were like that, my job would be much easier."

A loan officer with a savings and loan association: "Discriminate against military? Listen, around here the only people we discriminate against are the ones who wouldn't pay back the money we would lend them. And we discriminate against them by not lending them the money.

"As a matter of fact we recently got in a report of the percentage of customers we have who default on loans. The report is broken down by occupation and types of loans. Our military loan defaults are less than half the civilian default average.

". . . Sure it's a problem contracting a long-term loan when you know the customer will be moving from the area in a few years. But that's predictable and we know we can always find and contact the potentially delinquent military man or woman through the service locators. And many of our longtime military customers know the value of maintaining good credit references no matter where they go.

"Take the case of the Navy officer stationed in Japan. We recently got a letter from a Japanese mortgage firm seeking a credit reference on the guy. I toyed with the idea of having our



Credit

reference translated into Japanese but gave it up after I found out how much it would cost the firm. But the point is that that Navy officer gets a good reference from us, no matter what the language."

The credit people contacted by All Hands agreed on a number of points. First, they said they try to grant credit only to those who understand what they're getting into. Second, all agreed military people enjoy a distinct advantage over their civilian counterparts by having free legal advice available for the asking from their base legal officer.

Finally, while all admitted they had no legal recourse to the garnishment of an individual's wages while in the service for a past due debt, that didn't affect their credit granting attitudes towards the military. The reason for this was summed up by a credit card application processor: "Our company knows that when it comes to a military person having to be prompted to pay their debts, we've got a friend in that person's commanding officer."

As a matter of fact, Navy people who don't overextend themselves financially also have a friend in their commanding officer. On the other hand, when an individual's debts pile up to the point where his work suffers and the commanding officer is asked to help convince that individual of his financial responsibilities, things can get decidedly unfriendly.

But it's a logical progression: the skipper is tasked with fulfilling the command's mission; the individual is tasked with making his contribution towards fulfilling that command's mission. Getting the job done means ordering one's personal affairs. And a big part of everyone's personal affairs is money—its use and abuse.

The base legal officer is always ready to help. Common sense, however, in one's financial matters results in never needing that help.

Questions About Indebtedness

Q. *What is the role of the commanding officer in matters relating to indebtedness?*

A. The commanding officer is without authority to adjudicate claims or to arbitrate controversies concerning asserted default in fulfillment of private obligations of naval members, or to act as an agent or collector for the creditor, claimant or complainant involved.

Q. *Is the member ever released from paying debts because he/she is in the Navy?*

A. No. Navy personnel are not, by virtue of military status, released from any continuing obligation to obey pertinent civil laws or to comply with civil court orders decrees, or judgments.

Q. *What is expected of Navy personnel under such circumstances?*

A. They are expected to handle their financial obligations in a timely manner so as not to reflect discredit upon the naval service.

Q. *When entering into a credit arrangement what specific rules should be observed?*

A. Evaluate financial capabilities and establish a budget which will preclude the burden of ever-increasing debts.

Consult with a Legal Assistance Officer when contemplating large purchases on credit in order to avoid commitments which may be difficult or impossible to carry out.

Be wary of the "high pressure" salesperson. Think carefully and seek advice before signing an agreement or contract.

Never sign a blank contract and always multiply the number of payments by the amount to determine the total payment. Note particularly the penalty clauses.

Set funds aside to provide for cash purchases through civilian or military stores. A savings may be realized through use of this procedure.

Take advantage of the saving, counseling and lending services provided by credit unions organized by and for Department of the Navy civilian and military personnel.

Q. *What are some of the consequences which may result from failure to honor financial obligations?*

A. Basically, failure to pay just debts or repeatedly incurring debts beyond one's ability to pay may jeopardize:

Security clearance status.

Advancement status.

Duty assignment.

Qualification for reenlistment or extension of enlistment.

In aggravated circumstances, become grounds for disciplinary action or administrative discharge.

Mail Buoy

Detroit's First C.O.

SIR: As the first commanding officer of USS *Detroit* (AOE 4), I got a special kick out of your articles about her overhaul in Bath, Maine (see Nov. '76, All Hands). After six years of punishing operations, *Detroit* has indeed earned an overhaul. Thank you for letting all of us who have served in her follow her progress.—RADM R. B. McClinton, USN

Stern Shots

SIR: I noticed that the insignia for Engineering Aid in the November 1976 issue was printed upside down or backwards in your "Stern Shots" department. I can hardly blame you for this as the diagram in the United States Navy Uniform Regulations, 1975, is also wrong.—CUCM M. Coster

- *You're right. We've been told this error will be corrected in the 1977 edition of Uniform Regulations.* —ED.

SIR: It appears that an appropriate journal of Soviet naval vessel characteristics was not consulted in your January 1977 issue. "Stern Shots," page 48, is in error in that Kashin is letter E vice G and Kynda is letter G vice E. Undoubtedly, it was a slip of the "answer man's" pen.—LT J. E. O'Neil, Jr.

- *Our "answer man" goofed on this one.*—ED.

How Did He Manage It?

SIR: I read with interest your article in the October 1976 All Hands about the MS1 who sailed his boat to Puerto Rico in 54 days. I would like to know how MS1 Tarpley managed to get 54 days' leave on PCS orders. Did he get mileage for the trip, as do other POV transits on PCS orders? If so, under what instruction?—LCDR F. Naubhold.

- *According to BuPers, leave was granted to MS1 Tarpley to the extent of earned leave plus up to 45 days' advance leave, not to exceed 60 days at one time. If PCS orders state a report-no-later-than date or a specified maximum amount of leave that is authorized an order modification would be necessary. When government transportation is authorized as distinguished from directed in PCS orders, a member could be entitled to reimbursement for the cost of transoceanic travel utilized, but not to exceed the cost of available government transportation. Further information on this subject can be found in BuPers Manual articles 3020320 and 3020240 and Joint Travel Regulations M4159-4 and M7002-2.*—ED.

A Weighty Matter

SIR: The definitions of tonnage provided by your research department and BM2 J.P.L. in the Nov. 1976 All Hands are both inaccurate. It appears that BM2 J.P.L. is referring to deadweight, a weight measurement in long tons, which expresses a ship's carrying capacity. Displacement is also weight measurement expressed in long tons. But it represents the total weight of the ship, including its contents.—LCDR K. W. Lerner

- *It appears that you have caught us off balance with your clarification of the terms "displacement" and "deadweight."*—ED.

Coping With the Problem

SIR: In response to MCPON Walker's article on husband-and-wife duty in the Aug. 1976 issue, I see only a well-meant but poorly made attempt to cope with human problems with inhuman numbers and regulations. MCPON Walker's figures are very informative and probably correct. But when you try to use numbers to justify a bad situation, that can only be called a copout. Instead of really trying to sit down and solve these problems, I feel that MCPON Walker has tried to shame us into quiet submission.

But the real slap in the face came when Master Chief Walker referred to fairness in regard to husband-and-wife assignments. What is less fair than being forced to waste some of the best years of a marriage?

Navy couples realize that some separation is inevitable, and when our turn at sea duty comes we'll take the good with the bad, just like everyone else. But when that ship pulls back into port, why should I and others like me be the only ones whose wives are conspicuous by their absence?—RM3 R. A. and SM3 S. M. Sanders

- *Initially, I would like to say that I wrote the All Hands,* Husband and Wife Duty *article so that the enlisted community would have all the facts on which to base decisions about their personal lives. I fully realize the highly emotional nature of separation from loved ones due to assignment to duty and sympathize with those who must experience this type of hardship. The enlisted community can be assured that the human element is a significant factor considered during the assignment process. However, it has not been possible in the past, and may not be possible in the future, to assign* all *military married couples to duty together. Although no satisfactory solution to this situation exists at this time, the Navy is constantly reviewing its assignment policies and strives to find new methods to detail our married military couples to duty together*—MCPON Walker.

Everything's on the Up

SIR: In reference to LCDR J. A. H.'s letter in the Nov. 1976 All Hands, I can not cite an authority but have always understood that the line officer's star pointed down for the simple reason that when the sword arm is raised, the star is pointing up. —CAPT A. W. Whitney

Good as New

SIR: Unless there is a great coincidence, the event that happened 10 years ago described by LCDR Coshow in your December '76 Mail Buoy is exactly what happened while I was First Lieutenant and Gunnery Officer aboard USS *Shakori* (AFT 162) from Nov. 6, 1974 until April 6, 1976.

A training gear had malfunctioned in our 3″-50 mount and a replacement part would not be available for some time. We were making final preps for an extended period at sea which would include using our main battery.

I noticed the exact same gun at the Little Creek Amphibious Museum where we were homeported, tried the handwheel—and it worked. I received permission to use that part, which we did, and left port with our 3″-50 mount in commission.—LT R. B. Hoffman.

Constitution's Guns

SIR: It was disconcerting to read in your August 1976 issue about the machining-off of the cascabels on the forward long guns of *Constitution* to install blank-firing apparatus.

Whoever authorized this permanent damage to these historical relics should be keelhauled. It would have been just as easy to cast replicas to accommodate modern saluting ammo. —LTJG J.A.L. USNR(Ret)

Wearing Ball Caps

SIR: During two years' active service, I've noticed enlisted and officer personnel wearing various colored baseball caps with uniforms. It is my understanding of Uniform Regulations that specific articles of clothing are to be worn with specific uniforms. What is the Navy's policy on these caps?—EO3 W. Turner

- *Current regulations permit wearing of command (organizational) ball caps with all officer and enlisted* working *uniforms subject to local command restrictions. These unit ball caps can be worn only within an individual's command or squadron area.*

A recommendation to standardize ball caps Navywide is being considered by the Navy Uniform Board. It has been proposed that only navy blue ball caps be permitted and they would be authorized for wear anywhere working uniforms are permitted.—ED.

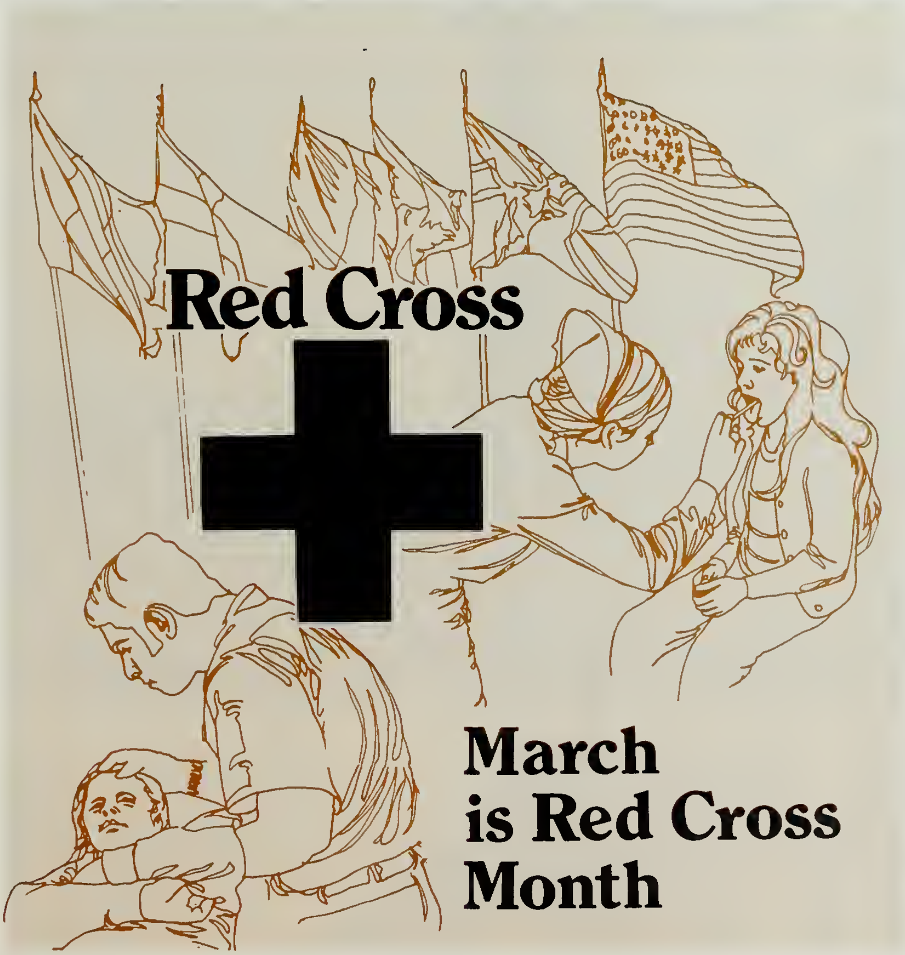
Flying U. S. Flag

SIR: I would like to know if the U. S. flag may be flown at night if lit by floodlights. Can an all-weather flag by flown in inclement weather? —R. L. G.

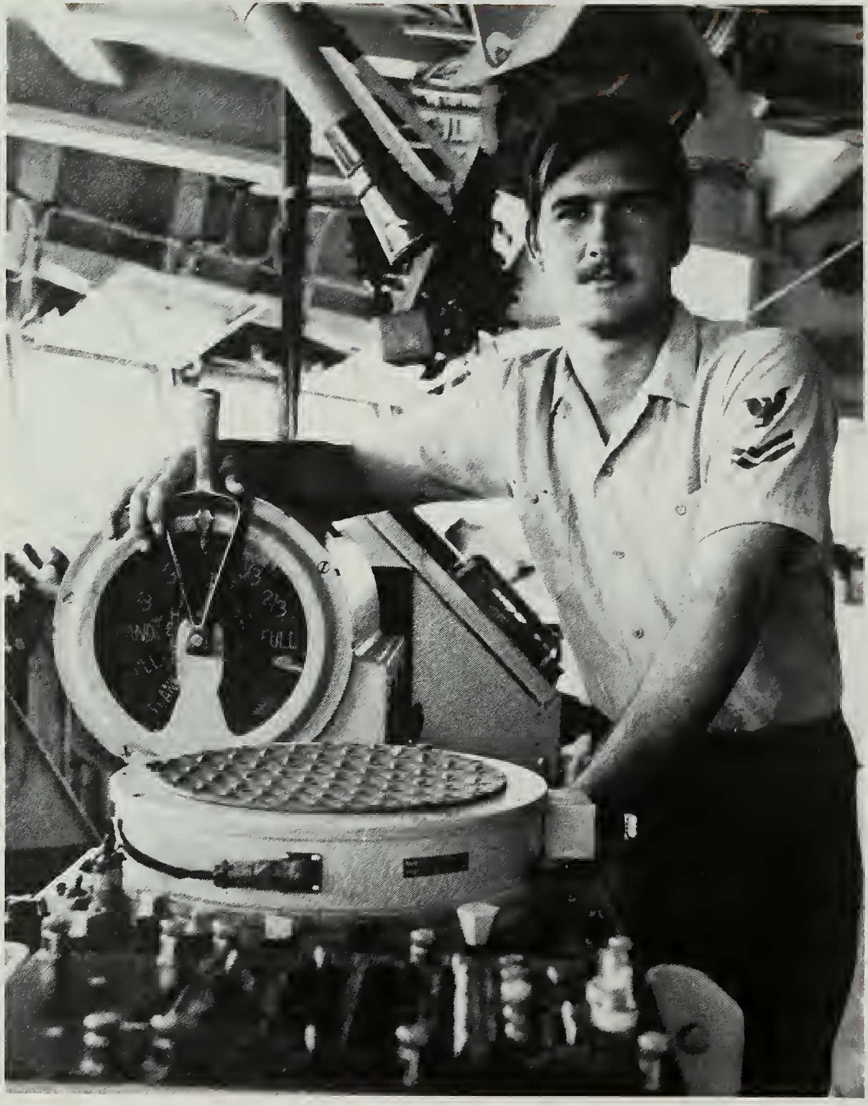
- *Legislation governing the use of the American flag was recently revised for the first time in 34 years. The amended code permits around-the-clock display by civilians of any all-weather U. S. flag. The new legislation concerns only civilian display of the flag; there has been no change regarding display of the flag by the military* —ED.

Reunions

- USS *Harding* (DD625/DMS28) —Reunion planned for May 28-30 in Nashville, Tenn.; contact G. Taylor Watson, Box 13A, McDaniel, Md. 21647, for information.
- USS *Lexington* (CV-2) — 24th reunion May 11-14, 1977, at Long Beach, Calif., for crew, squadrons and Marines who served aboard anytime between 1927-May 1942. Contact Walter D. Reed, 5410 Broadway—#105, Oakland, Calif. 94618.
- USS *Seal* (SS 183)—Former crewmembers interested in a reunion please contact Irvin L. Hill, 449 Prospect St., Plantsville, Conn. 06479, or Richard Manyak, 54 Case St., Farmington, Conn. 06032.
- USS *J. D. Blackwood* (DE 219) — Former crewmembers interested in a reunion contact Roy P. Wiesen, 1209 Schweitzer Rd., Greenock, McKeesport, Pa. 15135.


Red Cross
March is Red Cross Month

BY THE TIME YOU GET YOUR FEET WET OUTSIDE, YOU COULD MAKE ANOTHER RATING INSIDE.



Let's say you're finishing your first enlistment and you've done a good job for the Navy. But now you want more challenge. More opportunity. More training. And more earning power.

Before you look at the classifieds, take a look at what your Command Career Counselor has to offer. The Navy opportunities can fill a book, and he's got it. He can tell you about the undermanned ratings that need people like you. Men and women with a track record as performers.

If you're in an overcrowded or noncritical rating, you may qualify to crossrate through the Lateral Conversion and SCORE Programs. You could find yourself with a brand-new job. One with promotion opportunities. And leadership potential. What's more, a new rating could mean more training. And a new duty station.

But there's plenty of room for growth in your present job, too. In your next hitch, you'll probably earn another stripe or two. That means more training, more responsibility. And a chance to run your own shop. Maybe even a reenlistment bonus!

You won't know till you ask. So talk to your Command Career Counselor. And while you're at it, consider all the benefits you've got going. Like free medical treatment for you and your family. Housing. And 30 days' annual paid vacation. To mention just a few.

Sure, the grass always looks greener on the other side of the fence. But if you've got what it takes, you can make it greener right here.

NAVY

IF YOU'RE GOOD, IT PAYS TO STAY IN.

Stern Shots

Scrape the barnacles from your brain and match these famous naval sayings with their appropriate hero in history. (Our source is "Reef Points.")

_____ 1 "He who will not risk cannot win."
_____ 2 "We have met the enemy and they are ours."
_____ 3 "Good discipline is considered by all who know anything of service as the vital part of a ship of war."
_____ 4 "You may fire when ready, Gridley."
_____ 5 "Damn the torpedoes; four bells, Captain Drayton. Go ahead, Jouett."
_____ 6 "Hit hard, hit fast, hit often."
_____ 7 "A ship is always referred to as 'she' because it costs so much to keep one in paint and powder."
_____ 8 "Underway on nuclear power."
_____ 9 "The advantage of sea power used offensively is that when a fleet sails no one can be sure where it is going to strike."
_____10 "Pick out the biggest and commence firing."
_____11 "If that fellow wants a fight we won't disappoint him."
_____12 "Take her down."

A Farragut at Mobile Bay.
B Commander Howard Gilmore, USS *Growler,* ordering his crew to leave him on deck, wounded as he was, and submerge to save the ship (see photo below).
C Fleet Admiral William Halsey's battle cry.
D Dewey at Manila Bay, 1898.
E Fleet Admiral Chester Nimitz.
F Commander Eugene P. Wilkinson, USS *Nautilus.*
G Sir Winston Churchill.
H John Paul Jones.
I Commodore Oliver Hazard Perry at Lake Erie, 1813.
J Captain Thomas Truxtun.
K Captain Mike Moran, USS *Boise,* at Cape Esperance.
L Captain Isaac Hull, USS *Constitution,* 1811.
M Admiral Alfred Thayer Mahan.

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Answers: 1(H), 2(I), 3(J), 4(D), 5(A), 6(C), 7(E), 8(F), 9(G), 10(K), 11(L), 12(B).

ALL HANDS

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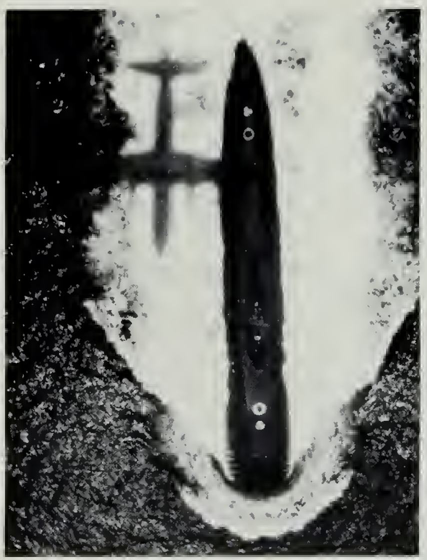
You pushed WHICH button!!! (For more on refresher training at Guantanamo Bay, Cuba, see page 4. Photo by PH1 Terry Mitchell.)



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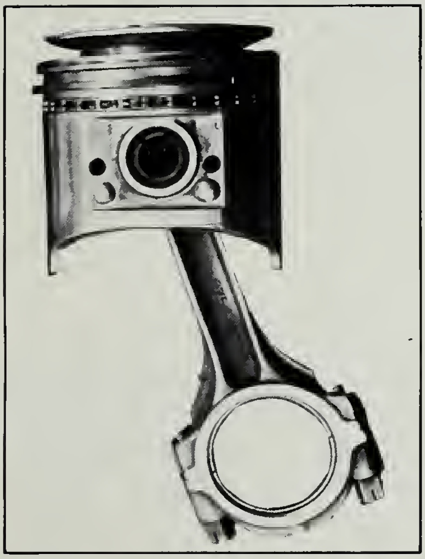

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MAY 1977 NUMBER 724

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Front Cover: A Tartar missile is fired from the Tartar-D surface-to-air launcher on the forward deck of the nuclear-powered guided missile cruiser USS California (CGN 36). Photo by PH1 William J. Pointer.

Chief of Naval Operations Admiral James L. Holloway III
Chief of Information Rear Admiral David M. Cooney
Dir. Print Media Div. (NIRA) Lieutenant Commander D. McCurrach
Editor John F. Coleman
Production Editor Lieutenant John Alexander
Layout Editor E. L. Fast
Art Editor Michael Tuffli

Staff LT Bill Ray
JO1 John Yonemura
JO1 Jerry Atchison
DM1 Lloyd Marshall
JO1 (SS) Peter Sundberg
PH1 Terry Mitchell
JO2 Dan Wheeler
JO2 Davida Matthews
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JOSN Francis Bir
Edward Jenkins
Elaine McNeil

Currents

Arlington Interment Criteria Expanded

● The Department of Defense recently announced revised criteria for interment in Arlington National Cemetery, effective Apr. 15, 1977. The acquisition of additional land by the cemetery has provided room for approximately 100,000 more graves and will extend the life of Arlington as an active cemetery through the year 2000. Under the expanded criteria, veterans who have been awarded the Distinguished Service Cross, the Air Force Cross, the Navy Cross, the Distinguished Service Medal, the Silver Star or the Purple Heart and were honorably discharged, now will be eligible for burial in Arlington. Veterans who were separated from active duty with a physical disability of 30 per cent or greater also will be eligible. Since 1976, eligibility has been limited to persons who died while on active duty, those eligible for retirement compensation, Medal of Honor recipients, high government officials who were veterans and the dependents of those eligible or already buried at Arlington.

Uniform and Grooming Regulations Revised May 1, 1977

● A forthcoming "Change Two" to Navy Uniform Regulations contains several changes which will further standardize Navy uniform and grooming regulations. The changes, which go into effect on May 1, include specific grooming standards on beards and moustaches, provide guidance on regulation uniform items obtained from non-Navy sources and set uniform requirements for travel on government aircraft. The regulations specify length and bulk guidelines for beards similar to those already in effect for hair. The bulk of a beard (distance that the mass of facial hair protrudes from the skin on the face) shall not exceed one-half inch. The length of individual facial hair shall be limited to three-quarters of an inch. Additionally, when a moustache is worn with a beard, it must blend smoothly into the beard. A new article in the revised uniform regulations also provides guidelines for personnel interested in suggesting changes to Navy uniforms. Full details on changes and additions to uniform and grooming standards are contained in BuPers Notice 1020 of 2 Mar 1977.

1977 Navy League Award Winners Announced

● The Navy League of the United States has announced this year's winners of its national awards. The awards recognize outstanding individual achievements in leadership, maritime affairs, science, service to community and literature. The winners are: Rear Admiral Kent J. Carroll, Commander, Naval Forces, Marianas; Air Controlman 1st Class Joe D. Huey, *USS John F. Kennedy;* Senior Chief Air Controlman Bonnie Sue Creamer, Recruit Training Command, Orlando, Fla.; Commander Allison J. Holifield, Officer in Charge, Nuclear Powered Research Submarine NR-1; and E. B. Potter, Professor of Naval History, U.S. Naval Academy.

Junior Officers Needed for Nuclear-Power Training ● The rapid expansion of the Navy's nuclear-powered force has created a demand for qualified unrestricted line junior officers (0-3 and below). The Navy currently has 29 Los Angeles class submarines, five Trident submarines, three Virginia class cruisers and two Nimitz class aircraft carriers authorized or under construction in addition to the 115 nuclear-powered ships currently in operation. Nuclear-trained officers are needed to fill billets in these ships and those scheduled to be built in the future. Eligible officers are encouraged to apply for nuclear-power training in accordance with BuPers Manual,6610300. Details are in NavOp 038/77 of March 1977.

Yeoman, Personnelman Volunteers Sought for Submarine Duty ● An increase in requirements for Yeomen and Personnelmen on submarines has created a pressing need for volunteers from the YN and PN ratings. Currently, there are 24 billets in Pacific Fleet submarines and 67 billets in Atlantic Fleet submarines open for Yeomen and Personnelmen in pay grades E-4 and below. Specific homeport requests will be guaranteed. Requests may be submitted on NavPers 1307/6 in accordance with Chapter Five of the Enlisted Transfer Manual. For further information, interested personnel may contact their detailer or Enlisted Rating Coordinator for Submarines (Autovon 224-1014).

Self-Help Bronze Hammer Awards Program Winners Announced ● The Chief of Naval Operations has announced the winners of the Navy Self- Help Bronze Hammer Awards Program. The program recognizes those naval activities which have made the most progress in improving the quality of Navy life by using self-help for the enhancement of living quarters and personnel support, welfare and recreational facilities. The winners and runners-up in each category are:

Category	Winner	Runner-up
Construction Battalion in the area, enlisted allowance greater than 1,000	NAS, Alameda	NTC, San Diego
Construction Battalion in the area, enlisted allowance less than 1,000	NS, Pearl Harbor	NSA, Treasure Island
Construction Battalion not in the area, enlisted allowance more than 1,000	NSA, Philadelphia	NAS, Chase Field
Construction Battalion not in the area, enlisted allowance less than 1,000	NSG, Winter Harbor	NWC, China Lake

In addition, special awards were made to the Pinehurst Community Center at NAS Lakehurst, and to Helicopter Anti-Submarine Squadron Light Thirty-five at San Diego.

No place for thin skins

Gitmo Refresher Training

BY JO2 DAN WHEELER
PHOTOS BY
PHI TERRY MITCHELL

A sailor fumbles with his OBA. An instructor throws out a question about damage control. The answer catches in a fireman's throat. A flame-safety lamp malfunctions and a petty officer's eyes close in despair—what else can go wrong? Even the engines seem to cough and stutter in embarrassment while a division officer and CPO commiserate in silence.

They thought their men were ready for Gitmo. They weren't.

That's what refresher training at the Guantanamo Bay Naval Base can do to a crew. It usually does. No one claimed training would be easy and it isn't.

Officers and men in a ship undergoing instruction can expect to work half days—that's 12 hours under the gun, six days a week. Underway at 0600, sometimes earlier; tied up again at 1800, sometimes later—and that's the easy part. Time in-between is spent drilling, practicing, learning.

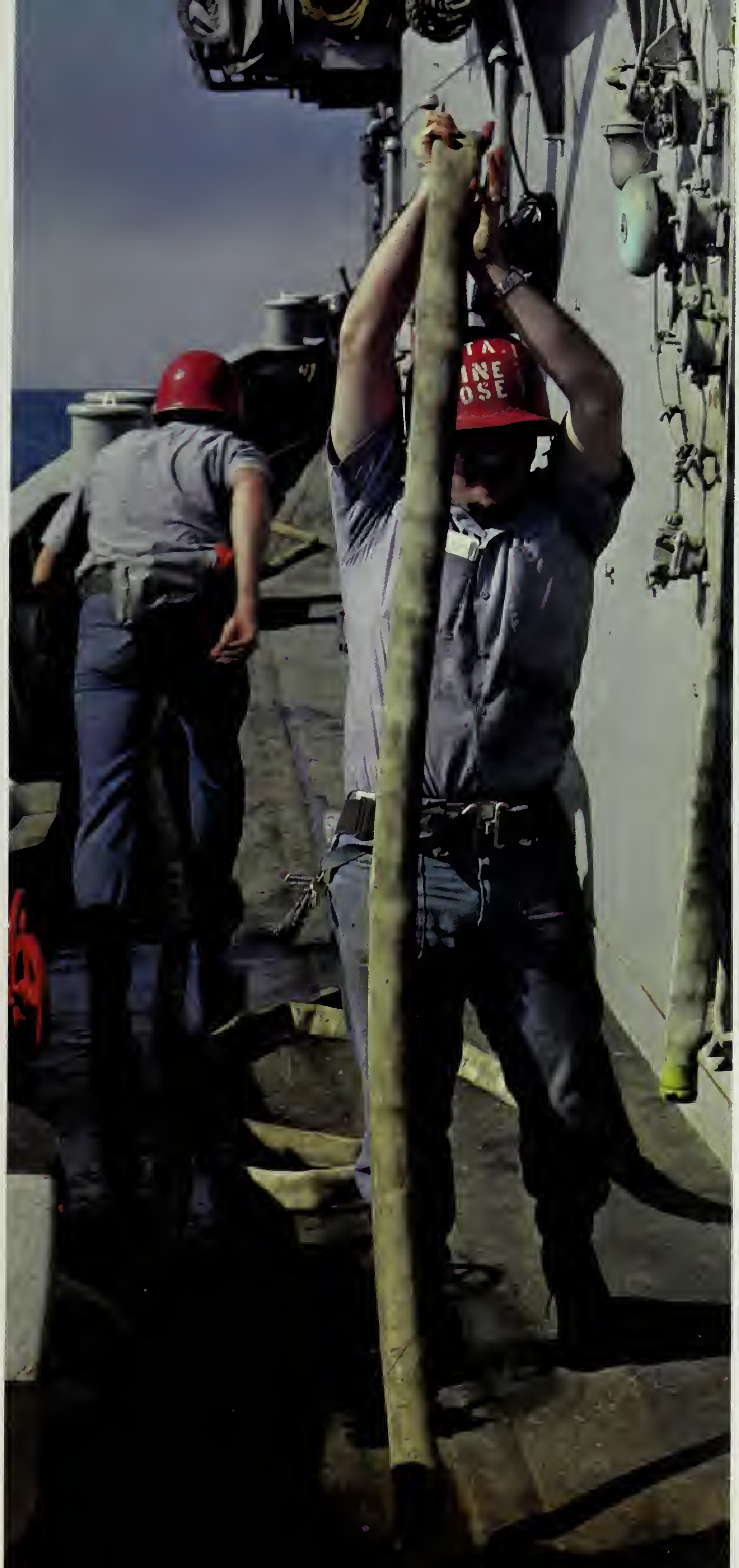
General Quarters quickly becomes the standard steaming condition. Engineering and damage control drills, warfare exercises and maneuvering operations are the Plan Of The Day, not just one day, but every day. For four weeks there is no stand down.

Gitmo is the toughest, most thorough shipboard training the Atlantic Fleet has to offer. It makes a ship combat-ready and molds her crew into an efficient fighting team. After a few days under the scrutiny of Fleet Training Group (FTG) instructor/observers (I/O), seasoned Navy men sharpen their skills, recruits get a taste of "salt" and a large helping of confidence. Gitmo demands even more. No operational procedure, fleet doctrine or piece of gear escapes untested.

"The training here pays off," said a 30-year senior chief, one of Gitmo's I/Os. "What they learn here may someday save their lives or possibly their ship. Down here a green crew becomes a team in short order."

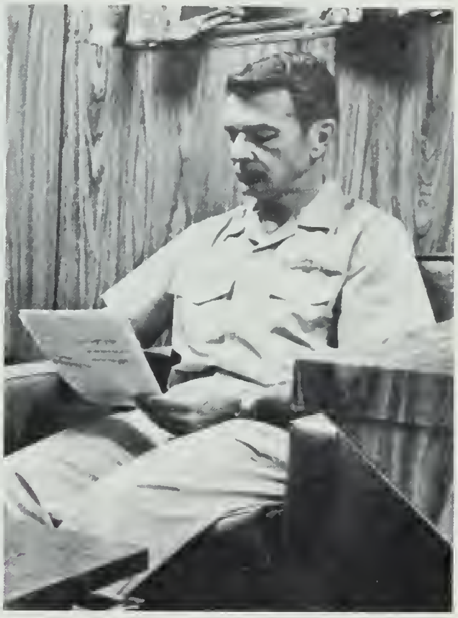
Ships come to FTG for shakedown cruises manned by men who never served together before. They come from extended stand down periods and from the yards. Most ships have experienced a high rate of crew turnover since their last trip to Guantanamo. Some are sharper than others, but they all need one thing—intensified, uninterrupted training.

Gitmo isn't a place for thin skins. Said one CO after a particularly trying day, "Sure I'm concerned about the discrepancies, but you can't let yourself get upset. Each commanding officer has to realize that if his crew were at the level of training they should be, his ship wouldn't be here.



Firefighting teams don't waste time when there is a drill.

Each group of I/Os gives the captain a report on the day's drill results. This captain has been to Gitmo several times and is not upset by his crew's initial failure to score highly.



The only thing that concerns me is, 'are my men trainable?' " The answer to that question begins to unfold on a ship's first day in Gitmo.

The FTG I/Os explain to each division what will be expected of them. Informative handouts are distributed to every sailor. Each is given a list of questions and answers about his job which he is expected to learn and learn well.

Quizzing individuals, however, is only a small part of the overall training procedure. The primary objective is two-fold. First, each division and department must be taught to operate as a team. Weak links have to be identified and given extra instruction. Each individual must understand what role he plays in the team operation.

Next, each division has to be taught how to operate as a part of the ship's overall team, a unified crew. No longer is the weapons department, for instance, unconcerned about the engineering department—now each learns

When a personnel casualty strikes, sometimes it's necessary to give some on-the-scene instruction.

Drills are held both in port and at sea. Sailors tote rescue and assistance gear onto the pier during one of numerous inport drills.

how its job depends on the performance of the other. When malfunctioning gear in any department breaks the rhythm, each segment of the team must continue to carry the ball. Not until a crew learns to do that are they ready to leave Gitmo.

The first step is the "walk-through"—ungraded drills for each division. Again an I/O explains what is expected and then solicits questions. "Speak up!" he said, "there's no such thing as a stupid question, just people acting stupid by not asking." Questions are asked, answered, and then the walk-through begins. Content of these initial walk-throughs is the same as those to be faced later except no grade is recorded. Its purpose is entirely instructional.

A typical example was a berthing compartment fire (drill) recently sprung by I/Os on a ship in training. The word was passed on the 1MC and a fire party went into action. They took too long and soon the voice of an I/O penetrated their battle dress station. "Hey, you got a fire here! Are you going to put it out? Who's the scene leader here, who's in charge?"

A big sailor clad in fire fighting gear said, "Me."

"Scene leader, take charge of your men!"

The time factor is important in drills, yet the safety factor is never ignored. Equipment is never tied up to the point that it cannot be activated quickly in case of a genuine emergency.

Those initial drills don't win any commendations. It's obvious that most of the crew knows generally what they should be doing, but they're nervous and make mistakes. In the case of the fire drill just described, the I/O stopped it and gave each man individual instruction. Then he fired a salvo of questions. If a crew member hesitated for more than an instant, the I/O answered his own question and fired another. When that walk-through was over, the division knew they'd been drilled and had profited from it.

Following each drill there's a briefing for the crew in which strong points are noted and weak points discussed. There's no brow beating or yelling. The tone is subdued but intense like that in a classroom where a professor is teaching students eager to learn. "Today you had a little problem," began the I/O, "but that's O.K. You're here to learn and we're here to teach you. Before long this will be routine and your scores will show it."

Frequently, when a briefing is completed, the leading petty officer (LPO) or chief asks an I/O if it's possible for him to come aboard after hours and critique several of their drills, off the record. It's not an unusual request and most I/Os don't object to returning.

After the crew is briefed, the captain is brought up to date on his ship's progress. "You've got some good men

Much signalman training is conducted from the signal shack at FTG. An I/O hoists a set of pennants during a drill with an inport ship.

"What else can happen to me today???"

Training continues after hours as a scene leader instructs his men on some of the finer points of damage control.

on this ship, Captain, and they're paying attention. That's what we want," reported one I/O.

"That's what I'm concerned about," replied the captain.

Thereafter, each ship's performance is reviewed weekly in a conference with the COs. FTG personnel look for overall progress, allowing for an occasional bad day. All ships have them from time to time when they can't "get it together." That's taken into consideration, but if the backsliding continues, extra training is in order.

Though the pace is hard on crews —"We've been at it 16 hours a day for more than a week," lamented one sailor—it's equally hard on I/Os. No man is expected to keep up a 12-hour per day pace for an entire two-year tour of duty. Consequently, I/Os usually get underway three days each week and ships in training don't draw the same I/Os each trip out. This benefits the ships as well as the instructors by affording crews the opportunity to draw on the experience of many I/Os during the course of training. I/Os, in turn, are able to

Heading back into port after a hard day of training. Many days a crew will leave before dawn and return after sunset.

During Rescue and Assistance drills, it is not enough to have the gear on the pier in time. It also must be in sound working order.

work a somewhat normal schedule by having two and a half days on shore weekly.

It's a learning experience for them also. "We come to FTG as an expert in one area," said a warrant officer I/O. "By the time we leave, we're usually well versed in three or four due to our association with fleet sailors and other FTG instructors."

On the morning of the first graded drills, I/Os arrive at the quarterdeck about 30 minutes early. Their counterparts on board meet them and the inspection begins.

Watertight fittings are checked, discrepancies signed off and training problems, thus far, hashed out. The engineering I/O checks out his spaces and reports to the captain, "Captain, you are ready to go to sea for training."

Once the graded drills begin, a personnel injury can be expected at any time to test any crew member's knowledge of first aid. The first casualty, in one instance, happened on the bridge. A sailor with a chalk white face staggered in and fell by the helm. Before he hit the deck, it was obvious he had a stomach injury—his (fake) "intestines" hung from his shirt and "blood" (a concoction of chemical coloring) soaked his clothes.

The OOD treated him quickly and correctly. "Most crews have a good idea what to do in case of a casualty," said the corpsman I/O. "Once it has been impressed on them that their corpsman or doctor could get killed or injured, they learn fast. By the time they leave Gitmo, they can easily pass a basic first aid course."

Incessant drilling takes its toll in strength and tempers, but with each new try, the results get better. "It's a beautiful thing," commented one ship's captain, "to watch your crew

The I/O is physically on the scene during each drill to instruct and correct as needed. It is more important that correct procedures are learned than it is to get a good grade.

Every man on board is required to know the basics of first aid. Here, knowledge is tested when a sailor stumbles onto the bridge "suffering" from a stomach wound.

being transformed from individuals to a team; changed from persons going their own way to a team working together. My experiences at Gitmo have convinced me that I/Os here are real professionals."

"I've been here four times," a senior chief boatswain's mate said, "and every time I've learned something. I'm good at my job, but I always learn more."

You can't help but learn something. "Most of the people who come here," said a senior I/O, "have the knowledge to pass a routine inspection. We try to delve deeper, though, so if

An I/O's day can start as early as 0500 and last until late in the evening. Here, an inspection of ship's records by damage control and engineering department I/Os draws rapt attention, and at least one chuckle.

a ship is faced with a real emergency the crew won't choke—they'll know their jobs. Some sailors say this is nit-picking. We don't think so. It's either right or wrong. The complainers are usually the ones who don't know their jobs inside out."

By the time the first drill is over and the ship is heading back to port, the crew is visibly exhausted. They've made mistakes and learned why their way of doing things is not as good as the right way. Their illusion that there is a "Gitmo way" and a "fleet way" has long since been deep-sixed.

The post-training briefing disclosed that the ship improved since the walk-through, but the I/Os continued teaching. "All right, let's have some questions," one said. "Think. Think about what you've seen and learned today. This isn't a game; it could happen for real. What are you going to do if there is an oil spray fire in the engineroom and one of your buddies is injured, six others are dead? This is serious, full time business—Let's have some answers!"

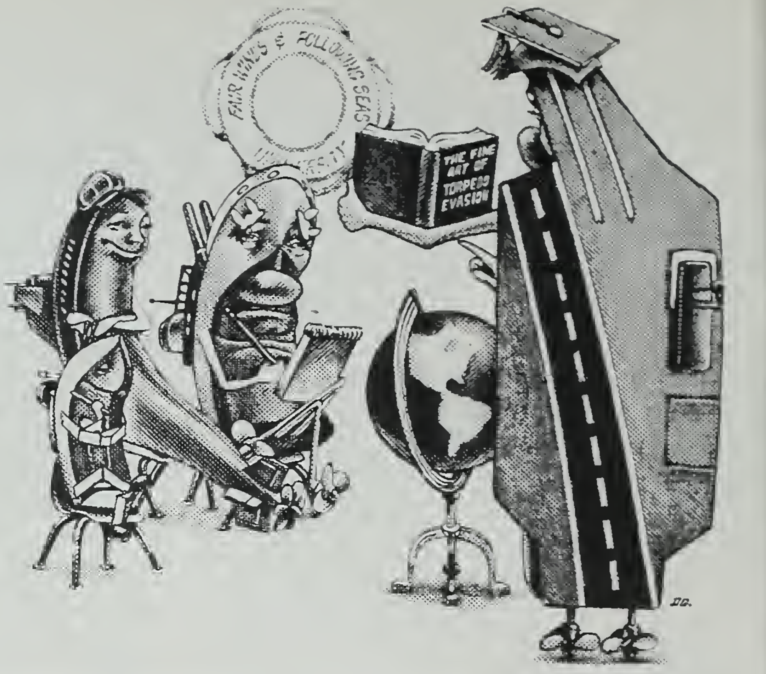
And so it goes on. The training never seems to end and there is no time for relaxation underway. All too soon, though, refresher training does end—a grueling month is over. The crew notices very little change in themselves—it happened gradually with little time to think about it.

Still, several hundred sailors have lost their initial awkwardness and found a confidence that comes only from knowing their jobs thoroughly. The I/Os can see the difference.

Another Navy ship has made it. ⚓

Gitmo I/Os usually ride ships in training three days a week and work on shore the other two and a half. Here, an I/O lectures an unseen audience on the merits of being prepared in case of emergency.

NAVY OXYGEN
BREATHING APPARATUS
TYPE A-3


FAIR WINDS & FOLLOWING SEAS
THE FINE ART OF TORPEDO EVASION
DG.

a college for ships

BY JO2 DAN WHEELER

Navy ships changed in design and mission as wooden vessels gave way to iron and iron to steel, yet the basic methods of training Navy men remained virtually unchanged through the years. Historically, training in the fleet was accomplished through absorption of recruits into existing shipboard organizations. This method served the Navy well until the outbreak of World War II.

Early in the war, however, naval officials realized that the relatively small number of career Navy men couldn't meet the training requirements of ships being commissioned for the war effort. Navy professionals were spread thin throughout the fleet and old training methods rapidly proved inadequate for a growing sea service with worldwide commitments. Wartime conditions and the influx of predominantly untrained people demanded quicker and more effective methods of readying crews for battle.

Admiral Ernest J. King, Commander-in-Chief, U. S. Fleet, responded to the need by ordering the establishment of Fleet Operational Training Commands whose sole purpose was to schedule and supervise operational instruction during shakedown or initial cruises and periodic refresher training as required. The present day Fleet Training Group (FTG), Guantanamo Bay are the offspring of those early commands.

Established in August 1943 and renamed FTG in January 1946, FTG, Gitmo is responsibile for providing realistic, combat-oriented, underway shipboard instruction. Emphasis is on evaluation and improvement of the various shipboard teams rather than directly increasing knowledge and skills of individual crew members. FTG also assists commanding officers in meeting operational and training standards imposed by their type and fleet commanders by using proven instructional methods, standards and procedures—everything taught is according to existing fleet doctrine and is not for use solely at Guantanamo.

At the end of 1958, FTG began training ships of friendly foreign nations in addition to those of MSTS, now MSC, U. S. Coast Guard and the Navy. With a staff today of about 100 instructor/observers and some 60 FTG support personnel, FTG trains the crews of 75 to 100 ships annually and makes available a host of facilities including:

- complete ship repair support
- ammunition and bulk fuel storage
- 6,500 feet of pier space
- two airfields
- services of a composite air squadron for training support
- medical and dental facilities
- fleet recreational areas and retail store outlets

Additionally, Gitmo has proven to be an excellent location at which to conduct any kind of concentrated shipboard evolution required by shakedown or refresher training. One major advantage of its location—though not always popular among crew members—is its isolation. There are few of the distractions normally present at stateside homeports which prevent sailors and instructors alike from totally immersing themselves into the strict training schedule.

Except for an occasional hurricane or tropical storm, Gitmo offers ideal weather year 'round for fleet operations. Within minutes of weighing anchor, any ship can be in deep water in a short time where any underway exercise from gunnery to ASW can be held. The 14,000-square mile training area is free of major air and commercial sea traffic, allowing freedom of movement to aircraft, ships and submarines involved in exercises.

"Training" has been the military mission of Fleet Training Group since its inception and has continued with only brief interruption for nearly 35 years. As long as the Atlantic Fleet requires a "school for ships," Gitmo will be the alma mater awarding the diplomas.

Grains of Salt

Exploring the Arctic Ice Caps

BY LT TOM DAVIS

Eric the Red led the way with the discovery of Greenland in 985, but it wasn't until the late 15th Century that other European adventurers and soldiers of fortune followed by showing an active interest in polar exploration. Excited by the possibility of finding a northwest passage to the Far East—and tales of jewels and emeralds scattered on the oriental beaches—Europeans organized numerous expeditions during the next 350 years attempting to discover the elusive route connecting the Atlantic and the Pacific Oceans.

Perhaps the most ambitious of the early expeditions was headed by Sir John Franklin of the Royal Navy in 1845. Setting sail with 129 men on board two ships, Franklin thought himself well-equipped to venture into the Arctic ice, but the hoary northern winter soon proved him wrong. His entire expedition perished when their ships became entrapped in drifting pack ice.

During the next 12 years, more than $20 million was spent on 20 rescue missions ostensibly formed to determine the fate of Franklin and his men. Between 1850 and 1873, three major American expeditions entered the search. One was commanded by Navy Lieutenant Edward DeHaven; two others by Navy surgeons, Elisha Kent Kane and Isaac Israel Haynes. Although a wealth of scientific information about the lands and waters of the eastern Canadian Arctic and the west coast of Greenland was collected, few traces of the ill-fated Franklin Expedition were ever found.

Of all early Arctic explorers, both European and American, one man's work dominates the history of Arctic exploration—Robert E. Peary, a U.S. naval officer. In 1892, Peary established for the first time that Greenland was an island, and during the next 40 years he travelled farther north and added more to the knowledge of Arctic geography and survival methods than any other man of his generation. On April 6, 1909, after 13 years of obsessive work, eight separate expeditions and nine winters in the Arctic, Peary realized his life's ambition when he and five companions became the first men to reach the North Pole. For this magnificent achievement, Peary was promoted to rear admiral.

Seventeen years later on May 9, 1926, another Navy officer, Commander Richard E. Byrd, made history when he and his co-pilot Floyd Bennett flew their tri-engine *Fokker* over the North Pole for the first time. Three years later, Byrd again made history when he became the first man to fly over the South Pole. From his first trip to Antarctica in 1928, Byrd continued active exploration and research for more than 28 years. He not only took part in the International Geophysical Year in 1956, but also directed the exploration activities of the Navy's Operation Deep Freeze I in the same year. Deep Freeze Operations have continued uninterrupted to this day.

Byrd, however, was not the first American to take an expedition to the southern polar cap. The credit for that belongs to another Navyman, Lieutenant Charles Wilkes, who became America's first polar explorer nearly 100 years earlier.

During the first 20 years of the 19th Century, U. S. interest in the area south of Cape Horn waxed as sealers and ship owners became concerned that America was falling behind Europe in the race for fishing and sealing grounds, new trade routes and bases in the area. In 1821, pressure was put on Congress to appropriate funds to outfit a naval expedition to explore the Antarctic waters, but 15 years passed before legislation was finally enacted.

On May 14, 1836, the United States Exploring Expedition was authorized. Another two years passed before it set sail from Hampton Roads, Va., under the command of LT Wilkes in six vessels in such poor repair that only two survived the four-year voyage.

During three forays into Antarctic waters proper, Wilkes was able to sight enough points along the 1500 miles of icy coast to establish that Antarctica was indeed a continent and not a group of separate islands as previously supposed.

Perhaps the most dramatic moment in modern U. S. naval polar exploration came on March 17, 1959, when USS *Skate* (SSN 578) surfaced through the ice at the North Pole. Four years later on August 2, 1963, *Skate* again made history when she rendezvoused with USS *Sea Dragon* (SSN 584) under the ice at the North Pole. These sub-Arctic achievements demonstrated that the Arctic Ocean is not only accessible under the ice cap, but is actually an operational area open to nuclear submarines regardless of season. After nearly 500 years of searching, the northwest passage had been found, with the North Pole thrown in to boot.

"The Soviet Union is systematically building forces at a steady rate to provide its political leadership with the political and military options afforded by a large, powerful and flexible navy. Our main adversary is on the move to capitalize on the use of the sea as another and, for them, a new area of competition with the West."

Moskva superstructure

The Soviet Naval Challenge

Searching for New Red Seas

ALL HANDS recently visited Rear Admiral Donald P. Harvey, Director of Naval Intelligence, to discuss the growing Soviet naval threat to U.S. national interests. Following is the transcript of the conversation.

Q. Admiral Harvey, a topic of increasing concern to many Americans is the growing Soviet naval challenge. Is there any way of measuring their Navy against our own?

A. Unfortunately, there's no easy way to do that because there are so many variables in the comparison. Some people compare numbers of ships and weapons, but that's just one factor, and it can be misleading. Actually, on paper, the total number of units in the Soviet inventory has been gradually decreasing over the past few years; yet their capabilities are increasing.

Q. How can that be?

A. Because they are replacing larger numbers of older, less capable units, such as small surface combatants and diesel submarines, with smaller numbers of highly capable units. And, the fastest growing areas of the Soviet Navy are the ones that give them the greatest capabilities. Notable among these are the capability to push their maritime defense farther into the open ocean; to deny use of the sea to others far from their shores; and to support their national policies worldwide.

Q. Could you give some examples of those areas where the Soviet Navy is expanding in both capabilities and numbers?

A. They include sea-launched ballistic and cruise missiles, nuclear-powered submarines, high endurance surface combatants with missile capability, sea-based aircraft, supersonic missile-carrying strike aircraft, ocean-going amphibious ships and underway replenishment ships. (⟶)

Right: Soviet Victor-class nuclear submarine in the shadow of U. S. patrol aircraft; Opposite page: Yakovlev YAK-36 Forger fighter plane approaches Kiev's flight deck.

Q. If raw numbers don't always give an accurate account of Soviet naval strength, how can the challenge best be measured?

A. One of the most relevant yardsticks is to evaluate the combat capabilities of individual Soviet naval units, and the ability of those units to fulfill their missions.

Q. How can we be sure what their missions are?

A. We can draw a pretty good estimate based on a number of factors. One is their basic needs with regard to the seas. We find those needs to be different from our own. We, and our allies, must depend on ocean commerce for our economic as well as our military survival. But the Soviets are essentially a continental power, and though they are increasingly exploiting the benefits of the sea, those benefits are not vital to their continued existence. Simply stated, the U.S. Navy must be prepared to control the sea areas required to fulfill our objectives, while the Soviets need only be prepared to deny us this use of the sea.

Q. Do the Soviets themselves give any clues as to how they plan to use their Navy?

A. Of course, their very activities give some indication. But, beyond that, the Soviet Naval leadership has been quite outspoken about their goals. This is particularly true in the case of Admiral Sergei Gorshkov, Commander in Chief of the Soviet Navy since 1955, and chief architect of its growth. Gorshkov speaks of broad ranging strategic and tactical missions for the Navy in support of what he calls "the battle against the shore." To carry out such missions, he calls for a large "balanced force" capable of carrying out a wide variety of tasks. He envisions an expanding role for the Navy as a worldwide instrument of state policy.

Q. Based on all the available evidence then, what is the Soviet Navy up to? What are its missions?

A. I think we can discern at least five: strategic deterrence and strike; control of their sea frontiers; sea denial; seaborne projection; and support of state policy. Their capabilities in these areas vary; some are old missions, some are relatively new. But the sum total of their ability to perform each is the best yardstick we have of the Soviet naval threat.

Q. Has Soviet naval strategic deterrence received the same high priority that it has in the U.S. Navy?

A. Over the last decade the Soviets have allocated considerable resources to their fleet of nuclear strike submarines and that trend continues today. In the past 10 years, they have completed 53 nuclear ballistic missile submarines. They added eight in 1976 alone—an extraordinary effort. They have 34 Yankee Class submarines, largely equipped with 16 SS-N-6 missiles with a 1,300-plus nautical mile range. There are now 19 of the more recent Delta Class subs, which carry the 4,200-nautical mile SS-N-8 missile. That range, by the way, is comparable to our Trident system which is not yet operational. Some DELTAs also carry the new SS-NX-18 missile, an improved version of SS-N-8 capable of delivering multiple warheads. Both the SS-N-8 and SS-NX-18 are capable of hitting most targets in the U.S. from Soviet home waters. In addition to the 53 modern nuclear ballistic missile submarines, the Soviets maintain a force of some 30 older ballistic missile subs—both nuclear and diesel powered. Today about 35 per cent of the Soviet strategic missiles capable of striking the U.S. are aboard submarines, and that percentage will probably grow in the future.

Q. What is the nature of the Navy's sea frontier control mission?

A. This is a traditional Soviet naval role in which they consider the Navy as an extension of their land defenses. The kind of forces assigned to this mission include their large mine warfare force, numerous amphibious craft, the naval infantry force, coastal defense units, segments of their naval aviation and surface combatant forces—many equipped with advanced missile and antisubmarine warfare systems. A notable feature of the Soviet sea frontier control mission is that modern technology has allowed them to extend their defenses far-

ther and farther from their shores.

Q. How does that differ from the sea denial mission?

A. Sea denial involves operations in waters outside those which the Soviets consider necessary to their defense. Relying primarily on their vast submarine fleet and their increasingly formidable land and sea-based air power, as well as their sophisticated principle surface combatants, Soviet sea denial operations could seriously threaten U.S. and allied sea lines of communication. Modern nuclear attack submarines such as the November and Victor classes pose a substantial sea denial threat. Surface combatants like the Kara and Kresta class cruisers, Kashin and the Krivak destroyers provide a large back-up force to the submarine and air sea denial forces and are a necessary part of the "balanced" Navy as perceived by Admiral Gorshkov. Undoubtedly, some of the most dramatic recent developments in this area have involved Soviet naval aviation. Their new supersonic Backfire bomber, now operational, represents a significantly improved capability, permitting anti-ship operations over the north Atlantic sea lanes, as well as those to the western Pacific.

Right: Kotlin class destroyer trails in the wake of the fast frigate USS Bradley; Below: Kythera anchorage in the Mediterranean, showing units of the Soviet fleet.

Left: Backfire supersonic bomber has greatly improved capabilities over its predecessor, the Badger; Below: Kamov Ka-25 Hormone ASW helicopter in flight near Moskva class helicopter carrier.

Q. What's the significance of their new aircraft carrier, the Kiev?

A. Kiev and its embarked vertical short takeoff and landing aircraft mark the beginning of a new era in Soviet naval development. The Soviets call Kiev an Antisubmarine Warfare Cruiser, reflecting their concern for U.S. submarine capabilities. The fact is, they have designated all principal combatants built since 1968 as ASW ships of one type or another. Kiev's 35 aircraft, which include Forger VSTOLs and Hormone helicopters, represent only one aspect of her capabilities. She also has at least two sonars, a nuclear-capable ASW missile launcher, ASW rockets and torpedo tubes, eight large surface-to-surface missile launchers, two twin-arm medium range and two twin-arm short range surface-to-air missile launchers, two twin 76 mm guns, eight small caliber gatling guns and extensive electronics and communications. That's some weapons platform! And there are at least two more Kiev class carriers under construction.

Q. Aircraft carriers, then, would seem to fit into the Soviet Navy's seaborne projection mission?

A. Carriers could imply an interest in that role. Seaborne projection is the use of naval force to project power ashore. Although the Soviets now have little ability for projection against well defended areas distant from their shores, they are building forces that could be the beginning of projection power. Developments we are watching include an expanding oceangoing amphibious capability, their new carrier-based air strike potential, a growing merchant marine that is adaptable to amphibious support, their large fleet of multi-purpose surface combatants and a slowly increasing underway replenishment capability.

Q. The other Soviet naval mission you mentioned was that of supporting state policy. Does that mean an increasing "show-the-flag" role for their units?

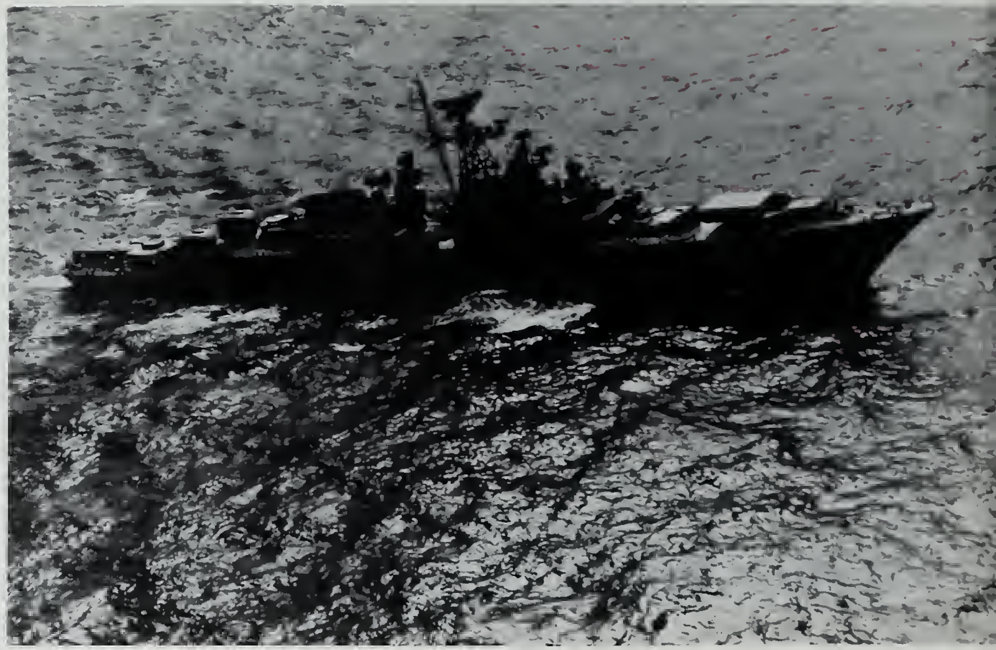
A. Yes, that trend is quite clear. Since the 1960s, the Soviet Navy has established itself in the seas of the world with forces operating regularly in the Mediterranean, the Indian Ocean and off the west coast of Africa. They also make occasional deployments of their combatants to the Caribbean. In addition, Soviet ships have made calls to an expanding number of ports throughout the world. Soviet naval reconnaissance planes use airfields in Cuba, Guinea and Somalia for staging operational sorties. Soviet intelligence collection, oceanographic research and space support ships deploy around the globe. Because of this greater worldwide naval reach, the Soviets are now in a position to narrow our naval options, while expanding their own in times of tension.

(⟶)

Q. Greater reach would require greater access to support bases in distant areas, wouldn't it?

A. Yes, and Soviet interest in the state policy support mission is indicated here as well. They have acquired access to port facilities in the Mediterranean, the Indian Ocean, the Caribbean and West Africa. The loss of Egyptian port facilities last year caused them to seek alternate facilities, and they have made some increased use of Syrian and Yugoslav ports. They have also begun to use air facilities in Somalia.

Below: Krivak class destroyer Bodry in the English Channel; Right: Kiev underway in the Mediterranean.



Q. Admiral, to gain some perspective on the exact nature of the Soviet naval threat, would you identify some of their current strengths and weaknesses?

A. Let's start with the weaknesses. The Soviets' open ocean ASW capability is low. They presently lack a meaningful sea-based tactical air capability. Their strike and reconnaissance bombers are vulnerable to attack beyond the range of their land-based fighters. Their underway replenishment capability is low. And last, but by no means least, geography limits the effective use of their Navy. Major fleet areas are geographically separated and located great distances from the world's major sea lanes. Moreover, access to the open ocean is limited by narrow straits in the Black Sea, Baltic Sea and the Sea of Japan.

Q. And their strengths?

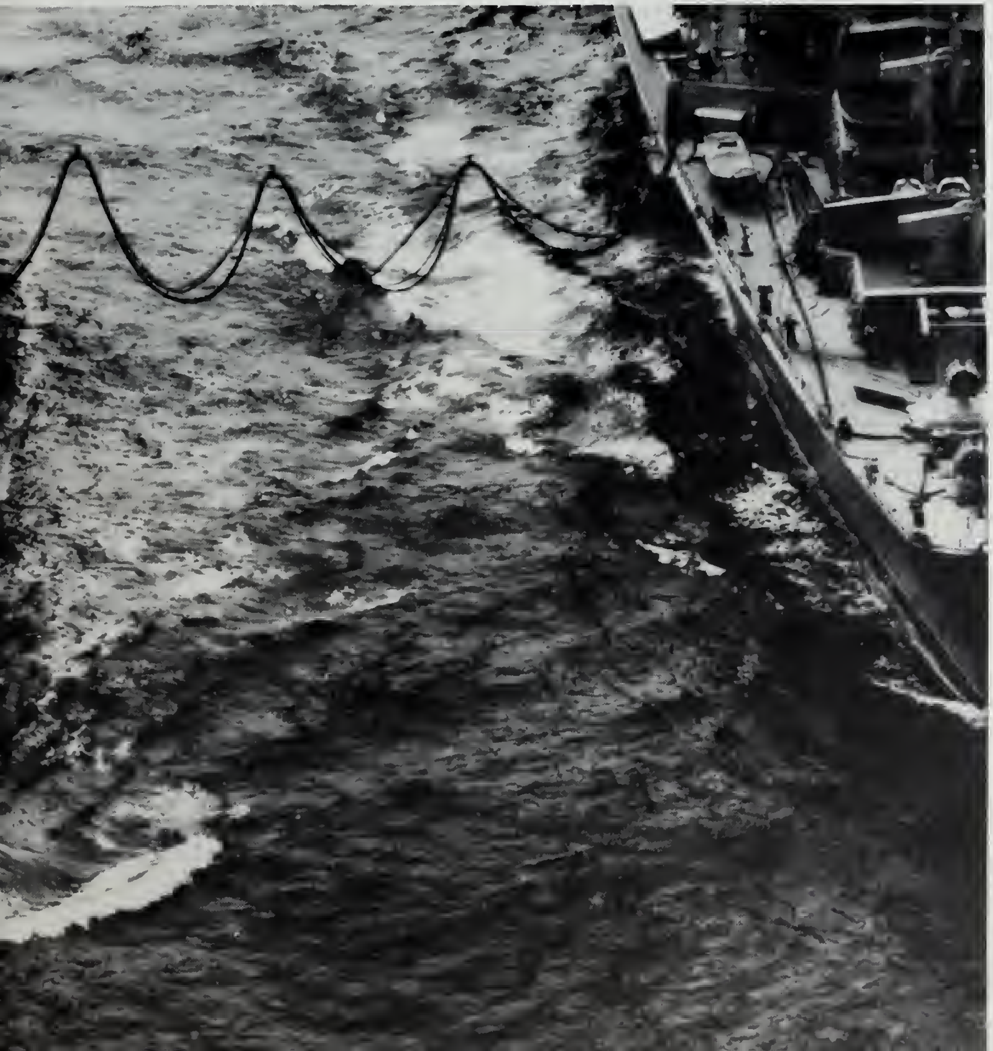
A. First, possession of the largest strategic submarine force, the largest general purpose submarine force, the largest mine warfare force and mine stockpile, and the largest shipbuilding industry in the world. Their extensive ocean surveillance system includes the largest fleet of ships dedicated to intelligence collection. They possess an advanced anti-ship missile capability which is spread among a variety of launch platforms—including ships, submarines and aircraft. Chemical, bacteriological and radiation defense measures are built into their ships and are regularly exercised. And, they are prepared to operate in a complex electronics warfare environment.

Q. Admiral Harvey, the Soviet Navy is clearly our most formidable threat on the high seas. How should U.S. Navy men and women view that threat, and what, if anything, can be done to counter it?

A. As professionals, we ought to look at the threat objectively,

Below left: Moskva class helicopter carrier, right, refuels from Soviet fleet oiler Boris Chilikin.

based on facts rather than emotions. We should not discount the fact that the Soviet Navy lags the U.S. Navy in technology, combat experience, sea-based air power and overall quality of many systems. At the same time we should be aware, as should the American people, that our primary adversary is building a large, powerful, flexible Navy that provides their leaders increasing political and military options. The Soviet Union is clearly on the move to capitalize on the use of the sea as another (and for them a new) area of competition with the West. The other side of that coin is a substantial rise in the complexity of the threat facing the U.S. Navy. We cannot stop the development of Soviet seapower. We can only meet the challenge to forestall a narrowing of the naval options available to the U.S., while tempering those available to the Soviet Union. ⚓



Rear Admiral Donald P. Harvey received a Bachelor of Science Degree from the U.S. Naval Academy in June 1947 and also holds two Masters Degrees from the Fletcher School of Law and Diplomacy. He became the 50th Director of Naval Intelligence on July 20, 1976, after serving as Chief of Staff and Director of Plans, Defense Intelligence Agency.

LIFE IN THE SOVIET

BY JO2 DAN WHEELER

"It interrupted my civilian career, but I find that inevitable," a Soviet sailor said of his tour in the Navy. Another, more inclined toward the Communist Party line, described his tour of duty as the "selfless taking up of arms in defense of the Motherland."

Both accept the Spartan life of the Soviet Navyman without complaint, though it's unlikely that either will serve longer than the mandatory three years.

And why should they? It's a demanding, exacting life where basic training begins many years before induction and "morale" means "political reliability." There is little basis for comparison between the Russian navyman and the American sailor. Here are some hard facts about the hard life of your Russian counterpart.

Life Aboard Ship

Only the most physically fit and best trained go to sea for their initial tour of duty; there is no sea/shore rotation during this period. Living conditions in newer ships are good—by Soviet standards—most have showers, mess decks and some air conditioned spaces.

Soviet Navy food is about the same quality as that served to workers in Soviet factories. Though selection is limited and culinary beauty ignored, no one complains—they expect no more.

Typically, breakfast is dried fruit heated and softened in water, brown bread and hot tea; lunch is similar—soup, bread and tea; and for dinner, dried fish, potatoes, bread and tea. Such capitalistic frivolities as chewing gum, candy, cookies and other geedunk are nonexistent. They're not even readily available at home, much less at sea. Compensating for the blandness of daily fare is a tea break each evening at 1930.

Berthing areas are divided into small living compartments, each sleeping about a dozen men. A single shelf in each space serves as mess, study and operating table in case of emergency. Warrants, officers and enlisteds are segregated in this "classless" society, yet none have quarters equal to those in a U. S. Navy ship. Officers' staterooms are similar to the officer quarters in U. S. ships of the 1920s. There are a lot of wooden fixtures and they are somewhat cramped.

Newer vessels have heads with showers—a luxury not found on older Soviet men-of-war—and while at sea, according to an official Soviet publication, submarine sailors have it better, "The crew can regularly take a shower." Showers evidently double as laundry facilities since there are none on board, however, their main purpose is nuclear biological decontamination.

It would seem that Soviet sailors rarely wash and never iron their two sets of wool blues though they are worn for liberty, work and inspection. Comfort and habitability are not high on the list of Soviet priorities.

There are no ship's stores comparable to those on U. S. vessels. Uniform replacements are evidently taken care of by the government; toothpaste, soap and other toiletries are issued in sickbay. Luxury items such as watches, cameras and jewelry simply are not available—even if they were, few sailors could afford them.

An internal radio system plays popular and classical music as well as an ample supply of political indoctrination material throughout the day, and—on birthdays—the pre-recorded voices of relatives wishing their favorite sailor many happy returns. (Birthdays are no small matter; the ship's cook bakes a cake and the entire crew joins in the celebration.)

Idle chit-chat, card playing and other frivolous uses of

NAVY

time are frowned on; certain types of approved recreation are scheduled. Every hour of the seven-day work week is earmarked for some "useful" activity—any free time is usually usurped by the political officer. Hours not spent doing ship's work are used in learning Soviet history and philisophy (according to Lenin) or studying rating (specialist) requirements.

Underway watches are stood in much the same manner as those in the U. S. Navy and the typical day is not drastically different:

Reveille is at 0600 followed by calisthenics at 0630; breakfast at 0700 and turn-to or political classes from 0800 until 1300 when lunch is served. Following the noon meal, the crew turns-to until dinner at 1800. Between 1800 and taps at 2300, either more political lessons, ship's work or "constructive" recreational time is scheduled.

Much emphasis is placed on learning the history of the Soviet Navy. Each crew member is expected, and strongly encouraged, to learn about his ship's combat record and honors awarded her. Frequently, the entire crew spends thematic evenings in the ship's martial museum studying their ship's exploits, charts of her past cruises, photo albums and the lives and deeds of heroes drawn from her ranks. Each is urged to live up to the glory accorded his predecessors (those names are never removed from their ship's roster).

It's traditional for Soviet ships to lower their colors when passing over the coordinates where another Soviet warship sank in battle. During a solemn ceremony, the crew listens to an officer recite the story of the heroic ship's contributions to the Soviet cause and, finally, a commemorative wreath is tossed ceremoniously over the side.

Promotions, Pay and Liberty

Every Soviet sailor does a particular job and only that one job. It may be maintaining a specific piece of gear or painting the ship's side, but that is his only assignment during his initial tour. Even though the Soviets have begun some cross training in recent years, each sailor is responsible for training his own replacement. He may not be released from active duty until his replacement can perform satisfactorily.

(Unless a sailor attends an advanced specialist school, this on-the-job training is the only hands-on instruction he will receive.)

Every sailor trys to win at least three special badges or pins: one as a specialist (3rd, 2nd, 1st and master); another for the Komsomol, a political achievement pin; and an outstanding conduct award. Specialist pins are designators of technical proficiency and not indicators of rank (though pay is affected by specialty at least as much as rank). Rank is determined by time in service and advancement is more or less automatic. Pay is based on a number of factors but the average recruit earns about $10 a month to start and can earn as much as $35 a month by the end of his three years.

Sailors who are technically proficient, politically enthusiastic and well-disciplined are encouraged to make the Navy their career, though less than 10 per cent do so.

Sailors who are technically proficient, politically enthusiastic and well-disciplined are encouraged to make the Navy their career, though less than 10 per cent do so. As a reenlistment incentive, qualified sailors are offered the rank of Michman (warrant officer). Michmans have better quarters, more pay and responsibility and the opportunity to be advanced to regular officer ranks after advanced schooling.

Junior officers do the work normally done by chief petty officers in our Navy. They are the hands-on professional specialists who can handle most maintenance in their departments—enlisted specialists are actually little more than low level technicians (by U. S. Navy standards). During his early years of service, each junior officer is evaluated by his commanding officer for his potential to assume command at sea. If not judged to be command material, he will become a career specialist, continuing to rise in rank but limited to one field only.

Commanding officers of Soviet ships usually choose their own successors. Each selects his executive officer from among the department heads; the XO has the opportunity to be tutored by the captain and take the command-at-sea test. If successful, he will be given command of his present ship when the captain is transferred, or command of a ship of the same class.

While the Soviet Navy officially endorses "one-man command," the captain (a line officer) is subject to strict professional and political checks. For instance, when an officer senior to the captain and qualified for command at sea rides his ship, the senior visitor may take the con while entering port and conduct training exercises. Additionally, the CO, as a member of the Communist Party, is liable to socialist criticism from the lowest ranking seaman in matters political. Constant interference by seniors and the shipboard political officer (ZAMPOL) along with criticism by subordinates tend to undermine the CO's authority and create a situation which stifles innovation, initiative and decisiveness on the part of commanders. In the past, political officers were not naval officers—now, however, there is a trend toward giving these officers some shipboard duties and experience.

Officers' pay structure is very complicated since it is based on rank, speciality, time in service, type of duty, position on board ship, etc. Pay is considered quite good by Soviet standards, however, and is equivalent to that of any highly paid Soviet professional. Because of the good pay and social prestige, most officers make the Navy their career.

Soviet warships make maximum use of every mile of every cruise. Every possible training situation is seen as an opportunity to make the crew more proficient. It is not unusual for a Soviet ship on a seven-month deployment to stay at sea for the entire seven months, although much of that time is spent at anchorage or tied to a buoy. Liberty for the crew is almost unheard of.

Liberty, when it does come, consists of several hours of shopping in a town near the homeport. A group of four or five sailors accompanied by an officer make up each liberty party. This is normal routine and is never questioned—the officer is simply the man in charge; every group must have someone in charge according to communist logic. The officer is not there to prevent defection as is thought by many westerners; he is simply the supervisor. Most Soviets would never consider defection.

Leave is another matter entirely. Most sailors don't get any during their first three-year tour. At most, an exemplary seaman will receive 20 days leave over a three-year period which he will more than likely spend at a Soviet recreation

camp. Married sailors rarely see their families during the compulsory service; single sailors have little chance of getting married. They don't feel that such regulations are unduly restrictive—it is exactly like what they have been trained to expect.

When a Navyman—officers or enlisted—reaches age 50, he can usually retire. Although his pension will usually be sufficient so that he will not have to find other employment, the state will continue to use his talents as an instructor or in some other military-related job. There are plenty of such jobs available, especially for men with skills and leadership experience.

Training and Politics

Every Soviet male (few women, it is believed, serve in the armed forces) receives 140 hours of intensive military training during his last two years of high school and is given the opportunity to join a DOSAAF (All-Union Voluntary Society for Assistance to the Army, Air Force and Navy), a military club designed to teach a specialty useful to the armed forces. His membership and particular interests usually determine which branch of the service he will join.

Regular naval officers receive five years of training in one of 12 Higher Naval Schools (roughly equivalent to the U. S. Naval Academy). Selection is based on previous academic and political achievement, and scores on competitive exams. It is also based on a subjective process ensuring that sons of Navy officers, politicians, prominent bureaucrats, and career enlisted men will have a better than average chance for selection. Thus, by Soviet standards, the Soviet Navy officer is an urban, educated and advantaged youth.

There are more than 100 nationalities within the Union of Soviet Socialist Republic—15 of them considered major—and the vast majority of Navy officers are Slavs, the elite of Soviet society.

Each November, Socialist Competition begins throughout the service. Everyone in each ship's company pledges to meet some kind of politically advantageous goal during the coming year. For instance, a sailor may promise to read 300 pages of Lenin to earn his Komsomol pin—regardless of what is pledged, it will be done even if it has to be fudged for the record. Political pressure never subsides—each sailor is continually being urged to do something more for the party.

At the end of each cruise or at the completion of active duty, each sailor is given the opportunity to write for the record his thoughts about the Navy and the accomplishments of his ship. Most read something like:

"I have been deeply moved by the untiring efforts of the officers and men to fill their Socialist Competition quotas in the area of speciality development. Their dedication to the Motherland has made me realize what a great blessing it is to be a Soviet sailor . . ."

(Based in part on a Soviet Navy publication—*Life in the Soviet Navy* by V. Mordasov—and interviews with knowledgeable U. S. Navy authorities.) ⚓

The Heat Balanced Engine

“Rube Goldberg

Would Be Proud”

STORY AND PHOTOS BY PH1 TERRY MITCHELL

Except for a few “Rube Goldberg*” devices, it looks like the old standard six-cylinder engine. Orange tubes, however, run from the brass thingumajig to the blue whatsit and back again, by way of the chrome widget. Not exactly your basic engine accessories.

This engine, developed at the U. S. Naval Academy, is an application of a theory that dates back many years in the history of the internal combustion engine. This theory purported that in order to make an internal combustion engine more efficient, you must lengthen the actual time of combustion in the cylinder.

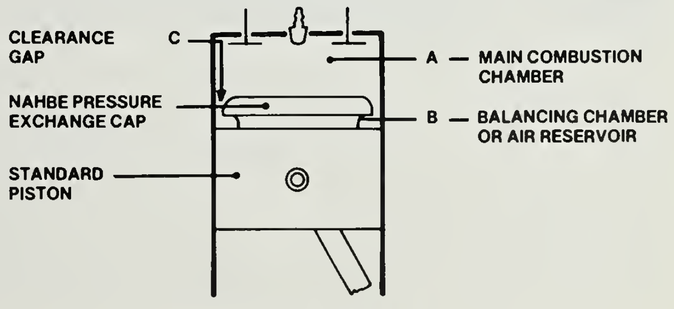
Academy engineers, Dr. Andrew Pouring and Richard “Rick” Blaser, have demonstrated the theory with their engine, identified as NAHBE, or Naval Academy Heat Balanced Engine. The experimental engine achieves more efficient combustion through the addition of mushroom-shaped caps machined to the tops of the pistons along with a modified air/fuel intake system.

Standard internal combustion engine pistons have flat or domed tops which compress a mixture of fuel and air against the top of their cylinder. The ignition of the compressed mixture by a spark causes an explosion that thrusts the piston downward. The caps which Pouring and Blaser added to the piston tops accumulate a secondary reservoir of air underneath them. When the spark-produced explosion occurs above the cap, the air previously trapped underneath is fed out into the cylinder, prolonging time of combustion, and making it more efficient.

Before he came to the Academy, Blaser had experimented since 1971 with various types of engines. First experiments involved the addition of perforated caps—not unlike bathtub strainers—to the tops of the pistons. Cap after cap of different sizes, types and patterns of perforations failed in both theory and mechanically. Finally, Blaser tried placing a solid cap on the piston. Success! He finally had achieved what others had been trying to do for years.

Taking his still crudely modified engine to major automobile manufacturers, he received little encouragement. Dr. Pouring, believing Blaser’s engine showed promise, formed a research team with Blaser and a few other technicians at the Naval Academy to further the development. Blaser was hired as a contract researcher.

The team pursued the theory further, refining the cap and redesigning it; it soon resembled the shape of a mushroom. Using a single-cylinder test engine on the Academy’s small dynamometer as a basis for the experiments, the team refined the engine through still more designing and modifications. The engine’s operation confirmed their expectations—increase of efficiency up to 40 per cent with more than an 80 per cent reduction in carbon monoxide and unburned


CLEARANCE GAP
C
NAHBE PRESSURE EXCHANGE CAP
STANDARD PISTON
A — MAIN COMBUSTION CHAMBER
B — BALANCING CHAMBER OR AIR RESERVOIR

Schematic of engine geometry

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* *Rube Goldberg (1883-1970) was famous for his cartoons of mechanical contrivances whose humor was derived from their absurd, unnecessary complexity.*

hydrocarbons (the biggest source of pollution by the automobile).

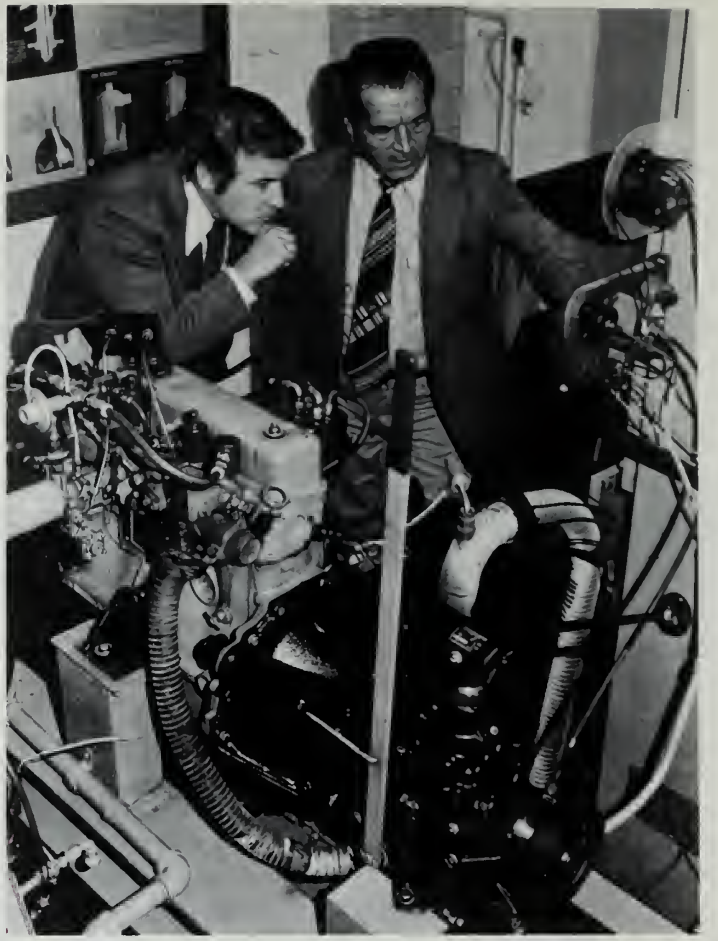
The time had come to apply the principles demonstrated in the laboratory to an engine in a four-wheel vehicle. Strictly a low budget operation, the team searched and finally found an old Army M-151 jeep in the scrap heap at nearby Fort Meade, Md.

The 10-year-old vehicle was towed to the Academy and rolled into the basement of Melville Hall where transformation would begin. First the jeep's engine was removed and completely disassembled. The pistons were sent to the nearby machine shop for necessary modifications. The piston was first machined down at the top, a weld was added to the top, and then machined to form the required cap.

The intake manifold was then modified to accept extra air inlets. Small air accumulators were threaded into the holes to provide extra air which is required by the engine. A heater water valve, from a late model car, was pressed into service as a regulator for the extra inlets.

With assembly completed, the engine was re-installed in the jeep. The body also underwent a few changes, mostly in the form of a paint job.

"Just for kicks we ran it on peanut oil."



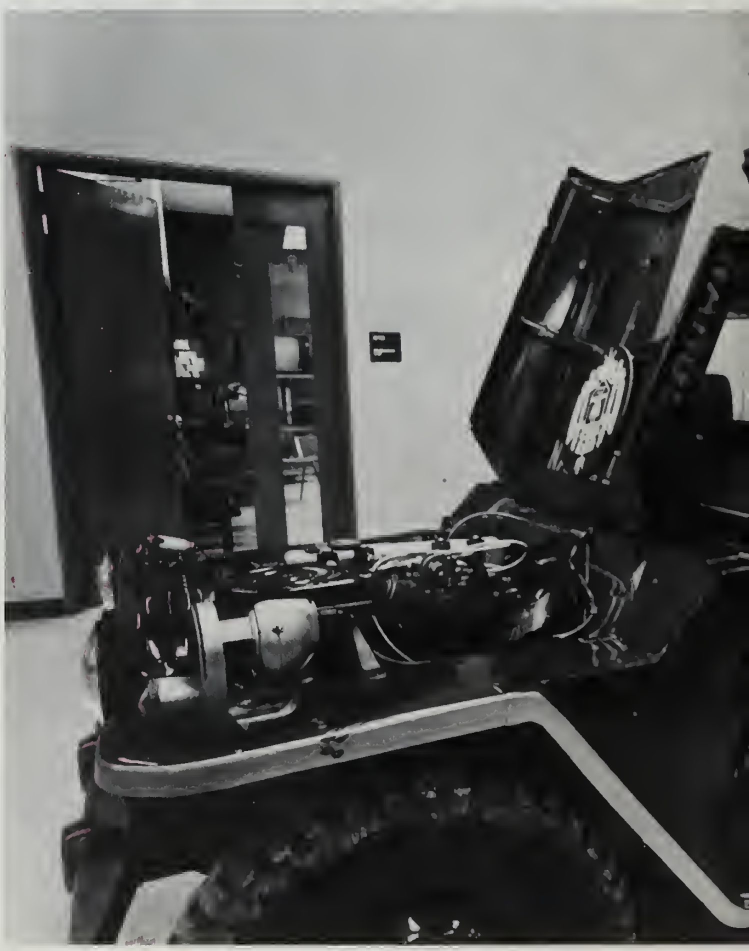
Rolled out of Melville Hall, the jeep was ready for the first test runs; it responded to the turn of the starter. The NABHE jeep was off. After a few short spins, it was evident that the engine functioned like the laboratory engine.

With slightly more horsepower and far more torque, the NAHBE-equipped jeep began to do some amazing things. A hill climb was conducted; the jeep bounced and jounced its way through the climb at idle. Transmission gear selection was no problem as the jeep pulled out in third gear.

One local skeptic conducted the same test with four passengers aboard. He then stopped and tried again, this time in fourth gear. With a slight strain, the NAHBE jeep chugged away, making the driver a true believer.

The blue and gold jeep now awaits other demonstrations and future modifications to its fuel system.

Lab research continued on the universal, standard, single-cylinder Combustion Fuel Research engine, modified to simulate the full-scale NAHBE. Study of possible fuels—alcohol, water and alcohol, alcohol and gasoline, diesel fuel—was undertaken. "We studied anything that burns," said Dr. Pouring. "Just for kicks, we ran it on peanut oil. The engine didn't like it because the peanut oil is so thick and we were reduced to putting it in with an eyedropper."



"Anyway," he continued, "I sent my wife to the market to buy a quart of peanut oil just for the test, and it cost somewhere around $1.37."

Besides the wide variety of fuels which can be used, the NAHBE has other benefits as well as applications. For one, pressures at the moment of combustion in the cylinder are lower, putting less strain on the engine's bearings. Thus, the bearings do not wear out as fast and the engine's structural strength can be less, thereby making it lighter than a production model of a regular engine.

Conversion of the Navy's P-250 fire pump to diesel fuel operation is one thing the researchers are considering. Again, owing to the efficient combustion process of the NAHBE, engines with the NAHBE modifications can be run as diesels or on regular gasoline. This conversion would give the fire pump the flexibility of running on two basic fuels. In addition, the pump would be quieter and would run smoother. "Quieter and smoother operation in the Navy's point of view is an immediate gain for diesel type operations, especially for use in auxiliaries onboard ships," said Dr. Pouring.

Seeking to measure the NAHBE's success against other engines, the team took a partly modified engine to a consulting company in Springfield, Va., for testing against the Environmental Protection Agency's (EPA) standards for automobile emissions. The NAHBE scored well under the EPA standard of 15 grams per mile of carbon monoxide emissions with only about 7.3 grams per mile. "This performance is due to the fact that the NAHBE basically changes the combustion process," according to Rick Blaser.

This also eliminates the need for exotic and expensive treatment of the exhaust gases, namely a catalytic converter.

Efficiency in combustion also means less fuel usage. "And, octane rating of a fuel has no meaning in this engine," said Dr. Pouring.

Blaser stated that based on existing data, that would mean anywhere from a 15 per cent to 40 per cent gain in every barrel of crude oil refined into fuel for the NAHBE type engine.

The brass thingumajigs, chrome widgets and blue whatsits work along with a mushroom cap. No, not your basic engine accessories—perhaps that's still in the future. We like to think Rube Goldberg would be proud of this one. ⚓

Far Left:
Dr. Andrew Pouring and Rick Blaser, co-developers of the NAHBE, monitor a dynamometer measuring engine performance.

Above:
Trident Scholar Midshipman 1st Class Tim Whited, Dr. Pouring and Rick Blaser discuss Tim's project, a square-cylinder engine using NAHBE modifications.

Left:
Rick Blaser in the driver's seat of NAHBE I, powered by the engine that he and his associate, Dr. Andrew Pouring, developed.

New CHAMPUS Guidelines Are Issued

Navy dependents and retirees have one of the most comprehensive health care plans in the world at their disposal—Champus (Civilian Health And Medical Program Of The Uniformed Services). Under provisions of Champus, dependents of active duty, retired and deceased Navy people are eligible to receive medical care from a number of civilian medical facilities and physicians on a cost-sharing basis.

Though Champus covers many maladies and provides for treatment at numerous medical facilities, there are exclusions and conditions which must be met in order to qualify. Misunderstandings about these exclusions and requirements have caused some Navy families severe financial hardship: they were forced to pay expensive medical costs because Champus requirements had not been fulfilled.

In other cases, Navy people who were eligible for Champus did not take advantage of the program because they were not aware of their eligibility and consequently bore the entire expense of treatment at a civilian facility.

In an effort to minimize such occurrences, Champus officials are currently distributing specific, easy to understand guidelines Navywide for use in base newspapers, and a new instruction (DoD 6010.8) has been written which outlines the entire Champus package. Individuals with specific questions about benefits, or their own eligibility, should still contact their Champus representative at the nearest Uniformed Services medical facility before seeking treatment.

Space doesn't permit ALL HANDS to publish specific exclusions and requirements under Champus. In an effort, however, to minimize misunderstandings about approved treatments, the following list of covered illnesses and available health care is offered. The list doesn't outline specific Champus requirements in detail; a Champus representative upon request will fill you in as they apply to your particular circumstances.

- TREATMENT FOR ALCOHOLISM—Champus will share the cost, up to seven days, for inpatient hospital care required to detoxify a beneficiary during acute stages of alcoholism when the beneficiary suffers from delerium, confusion, trauma, unconsciousness and malnutrition, and is unable to function. Such detoxification usually takes from three to seven days.

Benefits related to treatment of alcoholism—detoxification and rehabilitation—are limited to 21 days per episode. Champus will share the cost for no more than three rehabilitative stays during a beneficiary's lifetime. There is no limit, however, on the number of inpatient stays for detoxification.

- SURGICAL ASSISTANCE BY A PHYSICIAN—Champus will share that cost, provided the procedure was complex enough to require a surgical assistant to be present and provided, also, a qualified intern or resident was not available. These restrictions are imposed as part of Champus' overall emphasis on assuring that payment is made only for care actually necessary.
- SUCCESSIVE INPATIENT ADMISSIONS—To give servicemembers a financial break, Champus regulations provide that successive inpatient admissions for their spouses or children will be considered as one confinement in computing their share of inpatient charges, provided no more than 60 days have elapsed between admissions. Exceptions are: successive inpatient admissions related to a single maternity care episode will be counted as one confinement regardless of the number of days between admissions; a maternity admission or an admission related to an accidental injury will be considered separate confinements and cost shared accordingly.
- STUDIES, GRANTS AND RESEARCH PROGRAMS—Champus will not duplicate payments when medical care is furnished as part of a scientific or medical study, a research program, or a program funded by a grant.
- PSYCHOTHERAPY—Champus will share the cost of one hour of psychotherapy treatment during a 24-hour period, up to a maximum of five one-hour sessions per week for inpatient care and two one-hour sessions per week for outpatient care.
- PRIVATE ROOMS—Champus will share the cost of private rooms only when there is a valid and acceptable reason for not using a semi-private room. Such reasons are outlined by Champus and any Champus representative will explain them.
- PRIVATE DUTY (SPECIAL) NURSING—Champus will share such cost if certain requirements are met. Details are available from any Champus representative.
- STANDARDS FOR HOSPITALS COMPLIANCE WITH CIVIL RIGHTS ACT—Champus will share cost only for care received from hospitals meeting its standards. Furthermore, it shares costs only for care from hospitals that do not practice discrimination on the basis of race, color or national origin—those that comply with Title VI of the Civil Rights Act.
- CUSTODIAL CARE—Custodial care is excluded from the Champus benefits package. Generally, custodial care is long-term care provided primarily to support the essentials of daily living in situations where the patient must have a protected, monitored and controlled environment. Champus will not share any related expenses with the exception of prescription drugs and medicines, and one hour of skilled nursing care per day (when such care is necessary).

- DENTAL CARE—Dental benefits are limited to care medically necessary in treating a medical problem covered by the program, and is essential for controlling that problem.
- ORAL SURGERY—Such treatment performed by a physician or oral surgeon is considered as medical care, not as dental care. Champus will not, however, share the cost of preparing the mouth for dentures, nor for removal of unerupted teeth, teeth that are partially erupted, teeth that are not in their normal position, or impacted teeth. Orthodontic work is also excluded except as related to correction of cleft palate.
- COURT-ORDERED CARE—Champus doesn't share the cost of court-ordered medical services or supplies.
- PREVENTIVE CARE—Generally, Champus will not share the cost of preventive care such as physical examinations, immunizations and screening procedures when no symptoms are present. Exceptions are outlined in the Champus instruction (DoD 6010.8).
- PHYSICAL THERAPY—Champus will share the cost of several physical therapy sessions per week when it is provided by a physician or by a registered physical therapist under supervision of a physician. These benefits are generally limited to a 60-day period for each illness or injury.
- MILITARY SERVICE-CONNECTED ILLNESS OR INJURY—Champus benefits are not available for such care—VA administers a program to cover this.
- MATERNITY COST SHARING — Champus will share the cost on an inpatient basis for all services and supplies related to a maternity care episode when an expectant mother plans to have her baby at a civilian hospital or similar medical facility. The only exception to this rule is ambulance service which is always cost-shared on an outpatient basis. Consult the Champus instruction or your representative for specific details about this provision.
- EYEGLASSES—Champus usually will not cost-share for eyeglasses, spectacles, contact lenses or other optical devices. Exceptions involve optical devices required as a result of surgery or serious eye damage.
- DUAL COVERAGE—Active duty service members are not eligible for benefits under Champus even though they may be dependents of eligible Champus recipients. Active duty members are covered under the Uniformed Services Medical Care System.
- DOMICILIARY CARE—This is care provided by an institution where the facility serves as a "substitute home" —it is not medically necessary for the care to be provided by an institution. An example of this is an extension of a hospital stay beyond the time considered medically necessary because the beneficiary lives alone. This is excluded under Champus cost sharing provisions.
- DIAGNOSTIC ADMISSIONS—This expense will be shared by Champus on an inpatient basis when the diagnostic tests could not have been performed on an outpatient basis. Diagnostic tests which can be performed on an outpatient basis are cost-shared on an outpatient basis regardless of where the tests were actually performed.
- CONTINUED ELIGIBILITY FOR AN INCAPACITATED CHILD AGE 21 OR OLDER—Champus will continue to share the cost of treatment for a child over 21 provided the child cannot support himself because of mental or physical incapacity. There are exceptions to this coverage and your Champus representative should be consulted for details.
- CONCURRENT INPATIENT PHYSICIAN CARE —In illnesses involving one of the three following situations, specific guidance should be sought from your Champus representative to ascertain the exact limits of Champus coverage: same physician/different types of care given concurrently; different physicians/inpatient medical, only, given concurrently.
- ANNULMENT, EFFECT ON ELIGIBILITY—An individual whose marriage to an active duty member or retired servicemember is annulled loses Champus eligibility as of 12:01 a.m. on the day following the day on which the court granted the annulment order. Champus benefits received between the date of marriage and the date of annulment do not have to be reimbursed.
- AMBULANCE SERVICE—Champus will generally share this cost.
- EDUCATION—Champus will not share the cost of any service or supply for general education as in the case of natural childbirth, remedial reading and special tutoring classes.
- DURABLE MEDICAL EQUIPMENT — Champus shares the cost for a wide range of durable medical equipment under both its Basic Program and its Program for the Handicapped, provided that the equipment cannot be borrowed from a local Uniformed Services medical facility.
- PRESCRIPTION DRUGS AND MEDICINES — Champus will share the cost of all prescription drugs and medicines with certain exceptions, most of which involve weight control drugs, non-USFDA approved drugs and drugs used in drug abuse related situations.
- COSMETIC, RECONSTRUCTIVE AND/OR PLASTIC SURGERY—Champus will share the cost of such surgery when it meets the following criteria: corrects a marked deviation from the normal standard and it existed at birth (congenital anomaly); restores body form following an accidental injury; or revises a disfiguring resulting from cancer surgery.
- PROGRAM FOR THE HANDICAPPED—Champus will provide care for the physically and mentally handicapped when certain requirements are met. Consult your representative for details. ⚓

‘There aren’t any STOP

BY JO1 JERRY ATCHISON

“I always think of it as playing double-deck pinochle,” he said as he laid out a drinking-straw diagram on the table. “The only difference is we Navy Air Controlmen (ACs) have to possess the ability to remember every card played.”

Navy Air Traffic Controllers are, by Navy standards, a small community of about 2,500 men and women (including the Marine Corps) who may use the pinochle analogy as a description of their work but consider it anything but a game. Recently, when a group of ACs got together in Memphis, Tenn., to swap professional notes and discuss air traffic control in their areas, their seriousness became apparent.

“Suppose each of these straws represents a runway,” the AC said. “Now each of these runways crosses or runs parallel to each other or intersects at right angles and all of them may, at various times, contain aircraft moving from one point to another.

“In the meantime you’ve got aircraft overhead in the area of this airport. They, too, are flying paths that may cross or run parallel or—God forbid—right at each other.

“If they were all cars on a highway, things could be sorted out and controlled quite nicely. Such things as stop signs and exit ramps, lane markers as well, tell the driver where they may and may not go and when.

“There aren’t any stop signs in the air and that’s where the air traffic controller comes in,” he said.

Air Traffiic Control can cover a broad range of feelings according to one Federal Aviation Administration (FAA) man. “On the one hand it can be hours of boredom followed by seconds of sheer terror,” he said. “On the other it can be likened to an orchestra conductor smoothly leading his group through a performance.”

All ACs learn that their primary mission is to ensure the safe, orderly and expeditious movement of air traffic under varying weather conditions. Contrary to the popular myths revolving around air traffic controllers as the men who sit in glass-enclosed airport towers and—while under a great deal of stress—tell the pilots of planes where to go and when, there’s a lot more than meets the eye.

“If all aircraft were the same, the job would be pretty simple,” the AC said. “One of our jobs is to maintain separation between planes in the air. But if you’ve got a single-engine private aircraft putt-putting along at 100 knots, being followed by an A-7 that’s cruising at 500 knots, the air controller has to do something about it.”

ACs learn, therefore, not only how to direct aircraft, but they also learn details of hundreds of military and civilian aircraft designs and characteristics. “After all, you can’t expect a commercial jet to turn in the same radius as that little two-seater.”

And it grows even more complicated. When a pilot calls in for land-

signs in the air'

Naval Air Traffic Controlmen (and women) are on duty around the clock and around the world ensuring the safe, expeditious flow of aircraft.

ing instructions, the Air Controlman must give precise and correct instructions. These instructions contain and are based on a great number of determinations made quickly by the AC. First of all, he has to recognize the aircraft and mentally review the performance characteristics associated with this plane. Does it have a fast or slow landing speed? Can it land safely with a cross wind or a tail wind? How much runway does it need to land and under what conditions? Can the plane be safely fitted into the approach pattern?

The AC must make all these determinations in the split seconds dictated by today's high speed aircraft. He doesn't have time to refer the matter to his superior. In the end, having to bear that type of responsibility is what attracts many of the Navy's ACs to their work.

"The best air controllers are not just those who accept responsibility," said one lieutenant commander, a former enlisted AC. "The best are those who actively seek additional responsibility."

Sharing the burden of responsibility within the rate can make for some interesting occurrences. For example, it is not unusual to see a second class petty officer working as an air controlman while a new chief may not be

Left: Air Control students learn proper airport procedures using this mock-up of a typical airport. Above: An air control module is manned during flight operations. Right: Operations onboard USS Inchon (LPH 12).

qualified to do so.

Every time an AC is transferred to a new duty station he must be retrained, requalified and recertified. Every airport has different characteristics. The new AC not only must learn the particular patterns flown in the area but other things as well, like memorizing all objects over 200 feet high in a 20- or 40-mile radius. He must know what type of air traffic to expect and from where. Because of this and many other variables, the newly arrived AC at NAS, Pt. Mugu, Calif., for example, may spend as much as two years learning the layout before being certified.

Then there are the unique requirements placed upon the Navy AC. Aircraft carriers are moving airports. The AC aboard the carrier must consider that the ship is moving, that his landing field is much smaller than ashore, and that—if it were a combat situation—those planes he is responsible for recovering may not be in the best of shape.

What effect does all this have on the air controlman?

"I know books and movies show us as nervous fellows with ulcers who finally give it all up when the stress gets too great," a master chief AC said. "But that's not the way things are. If we were like that we wouldn't be in the program in the first place."

The master chief's wife was quick to qualify that statement—just a bit. "There have been a few days when he's come home from work and I've known he still 'hasn't landed'," she said. "But there's really no difference between him and anyone else who has a hard day at the office.

"Besides, if they didn't like their work, why is it that every time two air controlmen get together the only thing they talk about is air traffic control?"

Navy ACs are governed by the rules and regulations established by the Federal Aviation Administration (FAA). It is the FAA that grants their "license" to do the job as ACs—the Facility Rating Card. It is also the FAA or a Navy doctor designated by the FAA who conducts annual physical examinations of each air controlman.

The Air Controlman Class "A" School at NATTC, Millington, Memphis, Tenn., is where all fledgling ACs get their first exposure to the maze of equipment, procedures, rules and regulations that dictate the air control-

man's work. The students train on equipment that closely approximates what they will find in the field. Included in their 14-week training program is time spent on various simulators that can sometimes be scarey in their ability to recreate "incidents" that the AC should never have to deal with but be prepared nonetheless.

One very nerve-wracking exercise for the AC student points out the importance of not only knowing what must be done and when but also the limits of one air controller's abilities.

Students sit at their radar panels and guide targets on their screens through the patterns and in the right direction, maintaining safe separation between planes and following the proper procedures. The instructor gradually adds first one, then another target to the radar display. Eventually the student reaches a point where he can no longer safely guide all the simulated aircraft through the patterns and he asks for help.

"The air controller who doesn't ask for help is kidding himself and endangering the planes intrusted to him," one instructor said. "That's why we put these kids through what can be a pretty frustrating exercise."

The story about the air traffic controller who didn't need help also circulates around the school. One AC, with many years experience, guided so many planes during a three-hour period that he did not once "un-key" his microphone during that entire time. His supervisor, who stood by ready to start passing off the overload of planes to another air controlman, was flabbergasted. When it was all over, duplicates of the tape made during all conversations between air controller and aircraft were sent to other activities. That Navy AC, and others like him, have earned high praised from the FAA.

At Air Controlman Class "A" School, individual instruction ensures each student learns the precise procedures required of their demanding rate.

There are about 26,000 FAA civilian air traffic controllers. An instructor at the FAA school for civilian air traffic controllers recently pointed up the reputation of Navy ACs: "Navy Air Controlmen accept a monumental responsibility day in and day out, every hour of the work day. Their ability to do that well is an example all Air Controlmen know and try to emulate."

Anyone for a little double-deck pinochle with an Air Controlman? ⚓

AC1 JOE HUEY

Air Traffic Controlman of the Year

Although air controlmen, as a group, don't like to discuss some of the "incidents" that can result in disaster, one that happened last year earned recognition for the air controlman involved and congratulations from his fellow operators.

AC1 Joe D. Huey was named Naval Air Traffic Controller of 1976 because he did his job as he was trained to do it—but in some rather unusual circumstances. You see, Joe was air controller onboard the aircraft carrier USS *John F. Kennedy* (CV 67), handling 14 planes in the air preparing to land, when that ship and the guided missile cruiser USS *Belknap* (CG 26) collided.

In *Kennedy's* air traffic control center, he quickly assessed the situation. As the approach controller, Joe immediately notified the 14 pilots of the circumstances and directed them into holding patterns. He gave them altitude assignments and provided constant radar vectors to ensure their safe separation. He did all this while communication equipment damaged in the collision gave out and equipment necessary for the safe landing of aircraft on a carrier became of questionable use.

Huey coordinated the safe landing of all 14 aircraft at a nearby shore installation in spite of equipment problems.

"Petty Officer Huey's calm coordination of the limited communications available and his correct application of emergency air traffic control procedures contributed greatly to the successful recovery of all aircraft," his citation read.

It may have been "all in a day's work" for AC1 Joe D. Huey . . . but what a day! ⚓

U.S. SAVINGS BONDS

Aim for Tomorrow

Alexander Hamilton took quill in hand on Sept. 13, 1789, and signed the first savings bond ever issued by the Treasury of the United States. That bond, for $20,000, was the first of five such bonds presented to the City of New York for a $200,000 loan to the federal government. It paid six per cent interest.

Not until 1879, could private citizens invest small amounts of cash in the government. Till then, the U. S. dealt with banks because all bonds had to be paid for in gold coin and there wasn't enough gold in general circulation. Then Congress approved a plan where the little guy could purchase $10 notes at the window of any post office—this was the birth of the Postal Savings System, which only recently came to an end.

Investment in the government by the private citizen took a big step with Liberty Bond sales in World War I. With World War II came the birth of Payroll Savings and millions of citizens became shareholders with the purchase of Series E and, later, Series H bonds.

Are you one of the shareholders? Now is the time to get on the bandwagon—May is Savings Bond Month. Below are two tables showing how the plan can work wonders for a future retirement or business investment nest egg, or a fund to put junior through college. Keep in mind that the interest rate on new issues of U. S. Savings Bonds is subject to continuous review by the Treasury and may be increased or decreased in accordance with changes in economic and financial conditions. Therefore the below tables reflect *current* interest and growth rates.

HERE'S HOW THE SAVINGS BONDS RETIREMENT PLAN WORKS

Monthly Purchase for 15 years	Original Investment	Interest*	Total Accumulation	Exchange for H Bond	Average H Bond Interest for 10 yrs
$ 18.75	$ 3,375	$ 1,980.36	$ 5,355.36	$ 5,500	$ 27.85
37.50	6,750	3,960.72	10,701.72	11,000	55.70
56.25	10,125	5,941.08	16,066.08	16,500	83.54
75.00	13,500	7,921.44	21,421.44	21,500	108.86
150.00	27,000	15,842.88	42,842.88	43,000	217.72

* *Add cash to purchase of next multiple of $500.*

HERE'S HOW YOUR "DOLLARS FOR EDUCATION" GROW IN SERIES E BONDS

If your Child's Age is:	Value of E Bonds at Age 18 through monthly investments of: $18.75	$37.50	$56.25	$75.00
at birth	$7,130.47	$14,260.94	$21,391.41	$28,521.88
1	6,503.47	13,006.94	19,510.41	26,013.88
2	5,912.47	11,824.94	17,737,41	23,649.88
4	4,830.21	9,660.42	14,490.63	19,320.84
6	3,868.61	7,737.22	11,605.83	15,474.44
8	3,014.22	6,028.44	9,042.66	12,056.64
10	2,255.16	4,510.32	6,765.48	9,020.64
12	1,580.76	3,161.52	4,742.28	6,323.04

Bearings

The Middies Show Their Colors. . .

June Week at the Naval Academy picked up a new tradition last year when it presented its first naval review.

Last June, the Academy's 80-foot yard patrol craft and 40 sailboats with sails full passed in precision formation before the Naval Academy superintendent and hundreds of June Week visitors.

It will happen again this year. Both the power and sail contingents will have a chance to display their seamanship in two 30-minute demonstrations of close maneuvers and racing tactics.

The sailing program will feature every type of boat used by the Academy's midshipman sailing squadron, which competes intercollegiately, and the midshipman sailing club.

In addition to sailing races in the Annapolis area, midshipman crews also sail in international trans-ocean races such as the Newport-Bermuda race and the Trans-Atlantic race. Last summer a contingent of Naval Academy yawls sailed with the Tall Ships from Bermuda to Newport.

. . .But Can They Stand Up to the Groton Gang of Four?

One trans-ocean sailing race the midshipmen have entered that may present formidable opposition is this year's Marion (Mass.) to Bermuda race to be held in late June.

The middies will want to keep their eye particularly on a 32-foot ketch crewed by a group who profess, "We don't particularly care about winning the race. We just want to beat the middies."

The four-man Groton crew is composed entirely of Navy chief petty officers—submariners all. "We just want to show those middies that 'Submariners do it better'," said ETC John Williams, owner of the boat *Wanderer* and official spokesman of the Groton crew.

"We're even going to sail her undermanned to give the midshipmen a chance."

Chief Williams admitted this is his first trans-ocean race but professed great confidence in his crew—all of whom have had previous sailing experience. He noted that a "fierce" training schedule, would get them all in prime shape for the big race.

The other "Wanderer" crewmen—ETCM Mike Quigley, ETC Leroy Osterfeld and QMC Jim Spear (Ret)—count heavily on their common submarine duty and sailing experience. Two of them are also Navy divers.

When asked if this meant they could win the race whether the "Wanderer" was above or beneath the water, Chief Williams chuckled and noted as how he preferred entering Bermuda— ahead of the middies—under full sail and above the water.

Watch future issues of All Hands for the outcome.

What's in a Name?

If you should ever wind up in the hospital at Naval Base, Subic Bay, Republic of the Philippines, you might hear the name Rodriguez more than once. Shown from left, Rolando, Rodolfo and Leonardo Rodriguez, all hospital corpsman, are brothers, stationed at the Subic Bay hospital.

There's only one element missing to make this photograph complete. Camilo, another brother and also a hospital corpsman, is serving with the SeaBees at San Diego, Calif. (Photo by JO1 Jun Calaunan)

Sailor: 1, Robber: 0

When Electronics Technician 2nd Class Kenneth Adkins of the nuclear submarine USS *Shark* (SSN 591) stopped at the Carlisle (Pa.) motel for the night recently he thought he was just going to get a good night's rest before continuing on to Pascagoula, Miss.

What Adkins got instead was a crack on the head and a surprising role in foiling an armed robbery. Here's how the motel manager told the story:

". . . Shortly after midnight . . . an armed robber herded six guests and employees from the motel's lobby into the adjoining office, forcing them to hand over their valuables and making the manager open the safe.

"At this point, Kenneth Adkins drove up and came into the motel seeking a room. The robber met him and cracked him over the head with a gun; he then dragged the sailor into the office and started to tie him up.

"At the right moment—and disregarding concern for his own safety—Mr. Adkins kicked the revolver out of the robber's hand. With another kick, he sent the robber sprawling over a desk. Several people were then able to pin him until the police arrived.

"Mr. Adkins averted still another disaster. One of the guests picked up the revolver and was twirling it around. Had Adkins not retrieved the gun from the woman and kept it, we almost certainly would have had a third shot fired, possibly injuring someone.

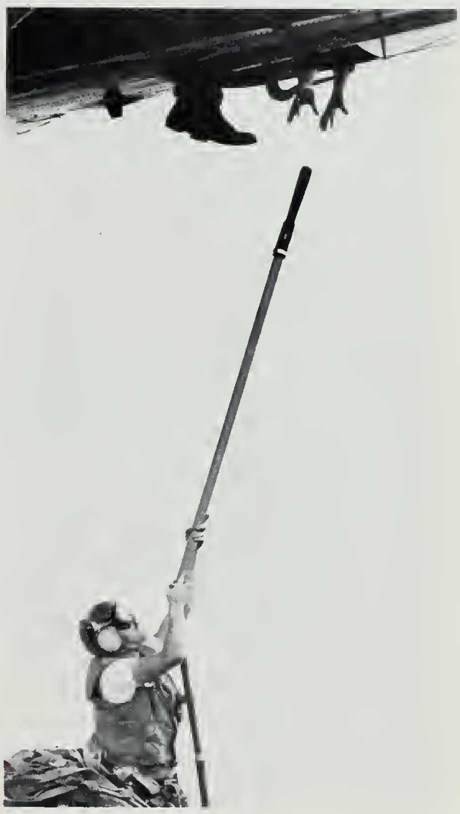
"When the police arrived, he tried to forego any hospital treatment for his injuries (fearing it might delay his return to his ship). We insisted, however, and talked him into staying the remainder of the night with us.

"For his actions and assistance, Mr. Adkins has my utmost gratitude and respect. To act as he did, in the face of great danger (the robber was an escaped prisoner) and without regard for his own safety, reaffirms my faith in the men who guard this country's security."

That goes for us, as well!

Twelve Who Marched

NAVYMEN BREAK FOR A REST —Navymen? No, we haven't switched cutlines. Actually, several of these "legionnaires" are Navy personnel assigned to the Naval Communications Station in Sidi Yahia, Morocco. The Navymen, 12 in all, took leave (not French leave, though) to appear as extras in the movie "March or Die," starring Gene Hackman, Catherine Deneuve and Max Von Sydow. Explained one volunteer, "It's just something I've always wanted to do at one time or another." He didn't indicate whether he was referring to filmmaking or meeting Catherine Deneuve.



Backward Boots

DON'T WORRY FRED, I'VE JUST GOT MY BOOTS ON BACKWARDS—No, the aircrewman reaching through the helicopter hatch is not a contortionist. Photographer's Mate 3rd Class Dan Fort caught the action while onboard USS *Blue Ridge* (LCC 19). Dan sends word the hands belong to one crewman and the feet dangling opposite belong to his assistant. And we thought we had photographic proof of the first rubber aircrewman.

BEST IN THE NAVY

BY JO1 JERRY ATCHISON

There's a lot that goes into an award-winning Navy club. It's more than a sprig of parsley on your steak.

Personnel of the four clubs recently selected as "Best in the Navy" by the Secretary of the Navy Messes and Club Awards Program know what it takes—and they're happy to share it with every club.

"Listening to patrons and giving them what they want is the operating principle of the Enlisted club at Naval Station, Charleston," said club manager Arthur Bercume. His club was selected as best in the "Enlisted Mess Open" category.

Bercume added that he's not the only one who listens to patrons. "The employees all take pride in the club and their jobs. Their personalities, and the attitude of wanting to please, encourage patrons to voice their suggestions."

Patrons' suggestions at the Charleston club have resulted in things like:

- Specialty food nights each month, with international menus at bargain prices.
- Disc jockeys from local radio stations manning the booth for disco night three nights a week.
- Boxing smoker staged at the club.
- A submarine sandwich and pizza shop open seven days a week when the dining room is closed.

The manager of "The Drydock," another award winning club at the Norfolk Naval Shipyard, thinks his patrons are pretty important also. "We want them to be proud of it," said James P. Astrauckas. His club was selected as best in the "Enlisted Club" category.

"Patrons have a part in improving the facility by evaluating every phase of the service and the items purchased," he said. "We have received some good suggestions, and they are being used in day-to-day operations."

These are some of the things that make "The Drydock" a special club:

- Professional entertainment six nights a week.
- One night of "Quadrascene," an all-encompassing experience with movies, slides, turntable and disc jockey activity.

But award-winning clubs in the Norfolk area are not restricted to "The Drydock." Over at the Naval Amphibious Base, Little Creek, is the winner in the "Chief Petty Officers' Mess Open" category. "The key to success is improvement," said club manager Carl E. Todd.

He went on to say that the reason Little Creek was able to make improvements was due to increased patronage. More customers mean more money. This, in turn, can be put to work for improvements.

Adding credence to Todd's formula for success is the fact that the Little Creek Chiefs' Club has won the Secretary of the Navy Messes and Clubs Award two out of a possible three times.

Todd, a retired Navy warrant officer with more than 37 years experience in food service, shares common viewpoints with Lieutenant R. B. Read—who has only 18 months' experience in the business.

Read, manager of the Officers' and Faculty Club at the U. S. Naval Academy, reported, "The people working for the Annapolis club are enthusiastic, hardworking employees. Their talent and experience is overwhelming."

Read manages the winner in the "Commissioned Officers' Mess Open" category and is quick to give the credit to his staff. "All the way through the employee ranks, loyalty and enthusiasm reign. The waitresses have all been with the club over five years and one waiter, Mr. Albert Carpenter, has been employed here longer (since 1943) than I've been alive."

Meticulous attention to detail, whether it be in the preparation and presentation of food (left) or in the decor (below) is important to award-winning clubs.

Read brought together many of the successful ideas of the other award-winning club managers. "It doesn't do any good to cut a corner and save a buck if you lose a customer. That leads to an important key: one must offer what his customer wants.

"Sounds simple but it really isn't . . . The club must cater individually to each class of patron because they are equally important for a successful operation."

But "keeping the customer happy" is not the only thing the judges looked at in coming up with this year's four winning clubs. And to those who say they can't offer what these clubs do because of their constrained budgets, take note that each entrant also was graded on sound fiscal controls and effective management.

It boils down to professional service, heeding the customers' advice and creative investments in popular activities.

—And that's more than a sprig of parsley on the steak.

(See page 42)

Well-trained, conscientious employees make sure customers of an award-winning club get exactly what they ordered.

Patrons of the Commissioned Officer's Mess (Open), Naval Academy, Annapolis, enjoy a buffet, at their award-winning club.

The spacious "Drydock" Enlisted Mess (Open) at Naval Shipyard Norfolk, another award winner.

Nepal Pilgrims

From Kathmandu to Everest

PHOTOS BY LT HELENIAK AND
LT M. S. HARDER, III

". . . request the pleasure of your company on trek in Nepal," read the unexpected telegram last September to Lieutenant J. F. Heleniak, a Supply Corps officer stationed in West Palm Beach, Fla. Its author was a fellow Supply type, Lieutenant M. S. Harder, III, assigned halfway around the world in Hong Kong. Two months, four telegrams and many letters later, Heleniak and Harder converged on the land of Everest to begin what may have been the most unusual leave undertaken by Navy personnel in 1976. Here is LT Heleniak's account.

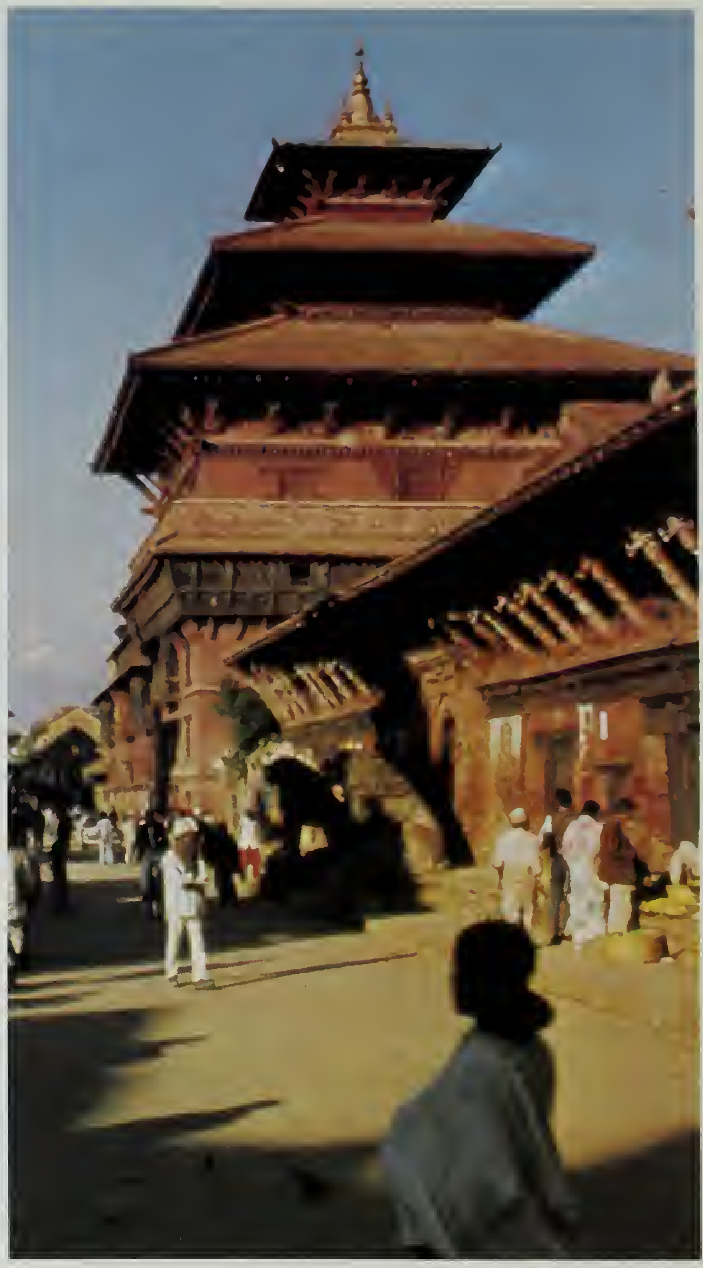
After two months of detailed preparations, the 30-hour jet ride halfway around the world gave me time in which to mull over my proposed leave.

"Nepal? Where the . . . is that?" the postman had asked when he delivered my passport. Then, I tried to get information by telephone about Kathmandu, the operator asked, "Oh, is that in Canada?" Even my father, when told of my planned vacation to Nepal, said jokingly, ". . . something's snapped in that brain of yours."

I imagined Nepal as an exotic, remote mountain sanctuary, inhabited by mysterious mountain people and the

Mount Everest, grandfather of mountains, seen from the air during a sightseeing flight.

Below: Porters are paid $1.50 a day to carry loads of about 80 pounds, 10 to 15 miles. Right: Temples of Kathmandu.



Left: Jim Heleniak, one of the expedition participants, is seen near 23,000-foot Lonpo Gang mountain. Above: The high elevations don't bother a yak grazing on scrub grass at the 10,500-foot level.

whole area overshadowed by the tallest of them all, Mt. Everest.

Before beginning our trip into the mountains, we spent three days acclimatizing to Kathmandu's moderate 4,300-feet elevation. We also learned that it never snows in Kathmandu (located on the same latitude as Miami, Fla.). But summer months bring monsoon rains from India's Bay of Bengal creating miserable leech-ridden, hiking conditions. The winter months of late December and January are quite cold and windy with heavy snowfalls in the higher valleys.

While not too well known in the United States, "trekking" —the British term for hiking—is popular in Nepal where you can hire bearers or porters for $1.50 a day to carry all your equipment. Our group of 10 trekkers started out with 29 porters and seven Sherpa guides.

Because the Sherpas spend most of their lives at altitudes varying from 7,000 to 14,000 feet, they are incredibly strong at high altitudes. Our Sherpa leader, Mr. Ang Lima, 28, had been on some full-scale Himalayan expeditions and had climbed as high as 26,000 feet without the aid of supplemental oxygen.

Throughout the trek, Sherpas supervised the porters, prepared the food and generally took care of everything. Sherpas are extremely loyal to the trekker. Even if a trekker sprains an ankle or cannot walk, they will take turns carrying the disabled hiker on their backs. One of the leader's unpleasant duties was to dismiss unnecessary porters as our supplies diminished. Our original group of 29 porters was reduced to 19 by the last day of the trek.

Each porter, incredibly strong, carries loads weighing up to 100 pounds, balanced on his back with a support strap around his forehead.

During a typical day of trekking to Langtang Valley we passed through two villages and across many farmfields terraced into the steep hillside. Trekkers are regarded by the villagers as rich people from faraway lands and they were fascinated by our dress and fancy equipment. Every night we had an audience of children who watched the activities in our camp until sundown.

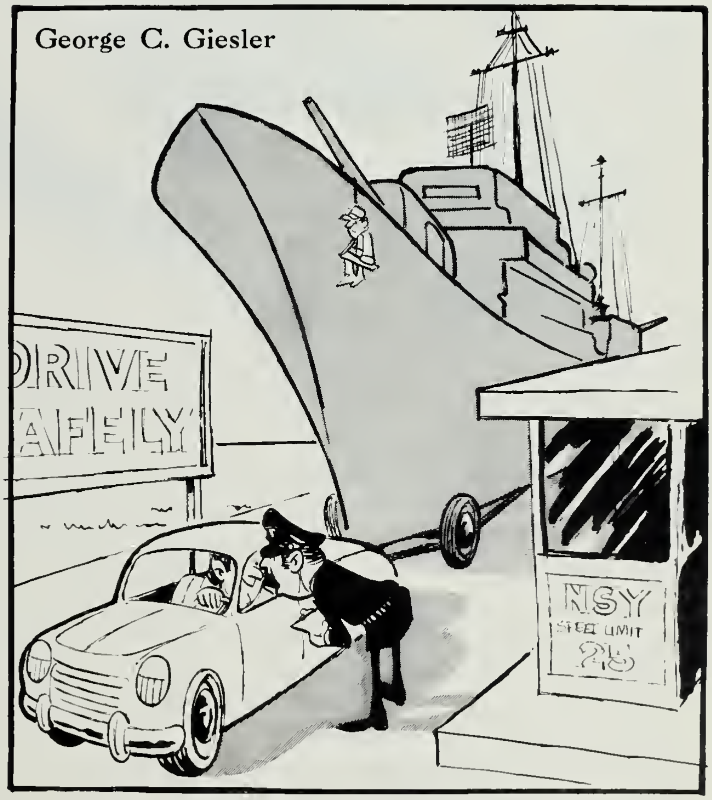
We had one strenuous day which featured a very steep climb from 8,400 feet to 13,500 feet over a distance of about seven miles. The other days averaged 11 miles over roughly 3,000 feet in elevation gains and losses.

After our trek to Langtang valley—with its majestic mountains—we returned to Kathmandu via an area of lakes called Gosain Kund—an area of major religious importance to Hindu worshippers, because the third lake is considered a Hindu holy lake.

Aside from a few headaches, nobody in our group suffered any ill effects from the thin air. (If you're planning such a trek, you should have a thorough physical exam before any high altitude climbing and also set a vigorous physical conditioning program to build up to top trim.)

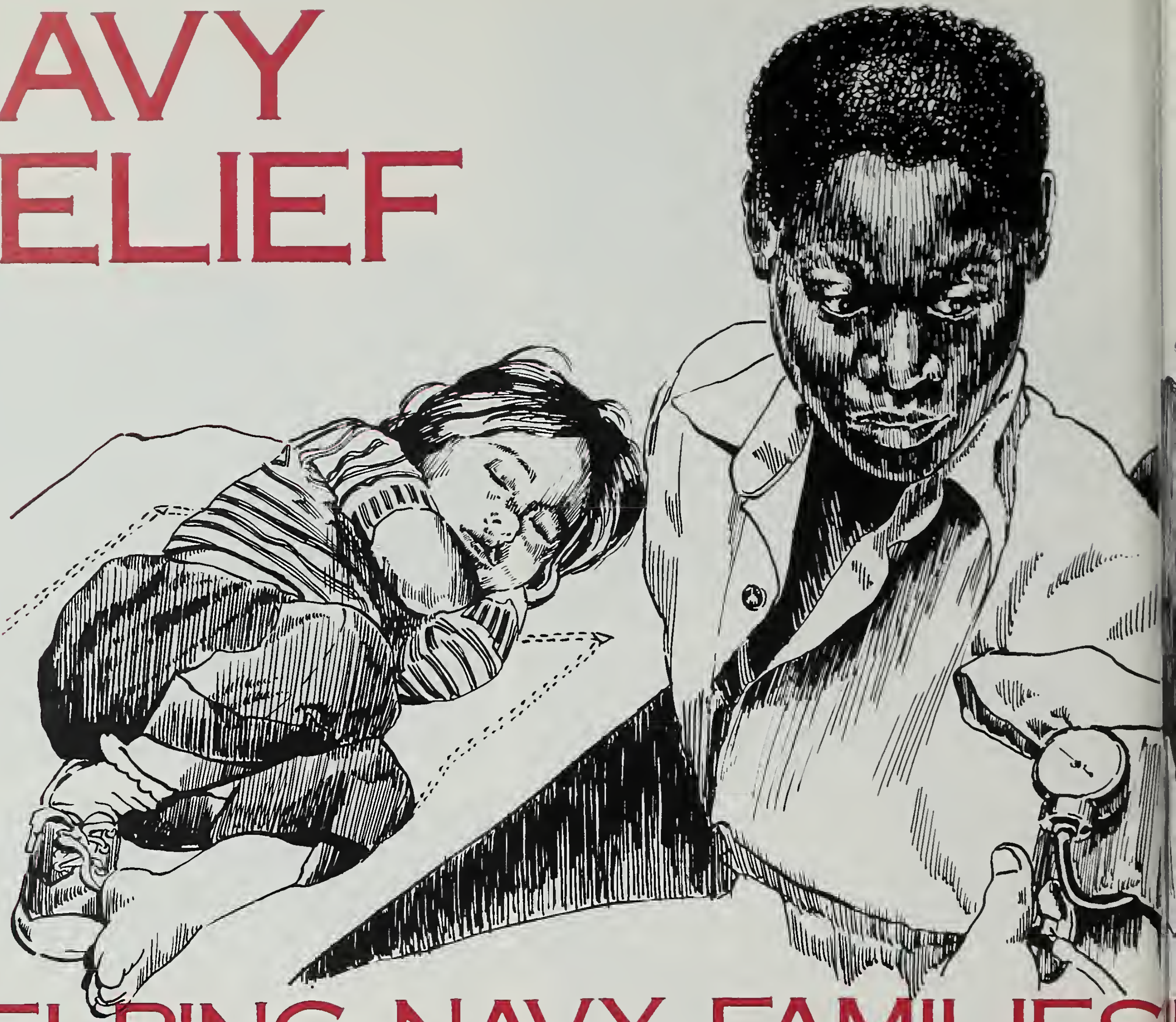
All in all, rural Nepal and Kathmandu provide vacations for the adventurous. The friendly, cooperative people, the curious mountain villagers, the spectacular Himalayas, the intricate temples of the Kathmandu valley and the sense of accomplishing a truly unique adventure, all combined to make Nepal one of the best vacation spots in Asia.

Anyone for trekking? ⚓



"I'd like to check your trunk, please!"

NAVY RELIEF



HELPING NAVY FAMILIES

When Hurricane *Pamela* hit the Island of Guam, Navy Relief officials responded to the request of Commander, U.S. Naval Forces, Marianas, for assistance and wired $100,000 to be used in relief efforts.

A phone call to Navy Relief Headquarters from a senior commander in the European area advised that 75 Naval personnel had not received their pay checks because of a mix-up. Although it had been confirmed that the checks were in the mail, there was growing concern for the payment of bills and necessary household expenses. Navy Relief came forward with the offer of immediate financial assistance.

These are two examples of unusual situations in which help was rendered by Navy Relief last year. But there were thousands of individual family emergency situations in which the Navy Relief Society provided $5.3 million to those in need. In helping more than 75,000 individuals and families, the organization dispersed:

- $3.5 million in direct relief loans
- $1.3 million in education loans and
- $471,000 in gratuities.

While dispensing funds is Navy Relief's chief occupation, the Society would be unable to do so without the donations of Navy people. Last year, Navy men and women contributed more than $2.3 million to their relief agency. This year, the call for donations is going out again.

During the period May 6 to June 6, Navy personnel will be called upon to help support their own charitable organization. But whether it is a Navy charity or any charity, it is important to know, first, exactly how those funds are used and what services the Navy Relief can provide.

Navy Relief offers emergency assistance for Navy and Marine Corps active duty and retired personnel, their dependents and their surviving widows and children. There is no field of human trouble in which the Society has not helped, either through counseling or by necessary financial assistance.

The types of aid provided include:

N NEED

- *Financial Assistance*—may be an outright grant, a loan without interest, or a combination of the two, depending on the circumstances in each case and the degree of hardship that may be involved in the repayment of the loan.
- *Layettes*—made by volunteers for new babies, for those who need them.
- *Thrift Shops*—where articles of clothing and essentials may be purchased at rock-bottom prices.
- *Children's Waiting Rooms*—provided at naval medical facilities.
- *Counseling*—on financial management and referrals to community resources with special attention to the young Navy person and service family.
- *Visiting Nurses*—who visit mothers and their newborn infants, and the elderly in need of medical attention at home.
- *Educational Programs*—providing opportunities for higher education to dependent children who might otherwise be unable to pursue their education beyond the high school level.
- *Sponsor Outside Programs*—such as Live Better for Less, Helping Hands, Toys for Tots, Motor Corps, and similar activities.

Those are a lot of services for the money. But there is one more important point to be made about the money Navy Relief collects each year: Not one penny of this collected money goes to pay salaries of Navy Relief personnel or telephone bills. Contributions go directly to help sailors and Marines and their families in need. Funds to cover overhead comes from interest earned on investments made by Navy Relief many years ago.

In those areas with no Navy Relief activity nearby, the American Red Cross serves as the contact point and your commanding officer ashore or afloat can get Navy Relief support for you. So you're never far from help.

The idea behind Navy Relief hasn't changed since the Society was founded more than 70 years ago . . . "the Navy and Marine Corps take care of their own."

You can carry on this proud tradition by supporting your Navy Relief Society so that it will be here to help you tomorrow. ⚓

BENEFITS DON'T MEAN A THING UNTIL YOU'RE WITHOUT THEM.

Quality medical care for you and your family is just one of your Navy benefits. Price it out in civilian life and you know it doesn't come cheap.

In fact, you probably know your benefits by heart now. Because you count on them. Things like commissary and exchange privileges. 30 days' annual paid vacation. Housing. Retirement. Just to name a few.

But what good are benefits without job satisfaction? The question is, do you know all about the many career opportunities currently available to you in the Navy.

Did you know that reenlistments under the STAR, SCORE or GUARD II Programs can open many new doors? With more training. New assignments. And a chance to run your own shop.

Or that there's plenty of room for growth in your present job? With an opportunity to earn an extra stripe or two. More responsibility. More schooling. Maybe even a reenlistment bonus, too.

In your next hitch, you'll find ad vancement coming a lot quicker tha if you had to start all over again in civilian job.

The opportunities, and the bene fits that go with them, are there If you're ready to accept th challenge. So get the full story. Se your Command Career Counselo soon. You won't get any sea stories. You'll get the facts.

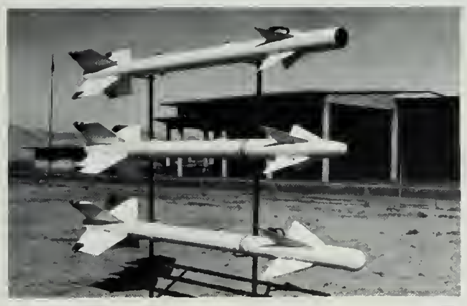
NAVY

IF YOU'RE GOOD, IT PAYS TO STAY IN.

Stern Shots

Don't be gun shy. How many of the missiles pictured here can you name? Check your answers at the bottom of this page.

A



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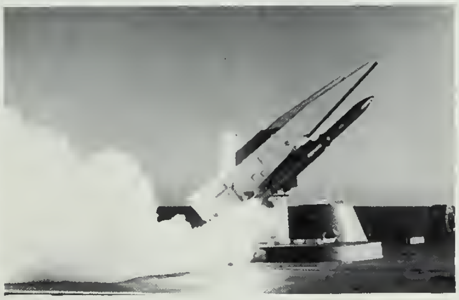

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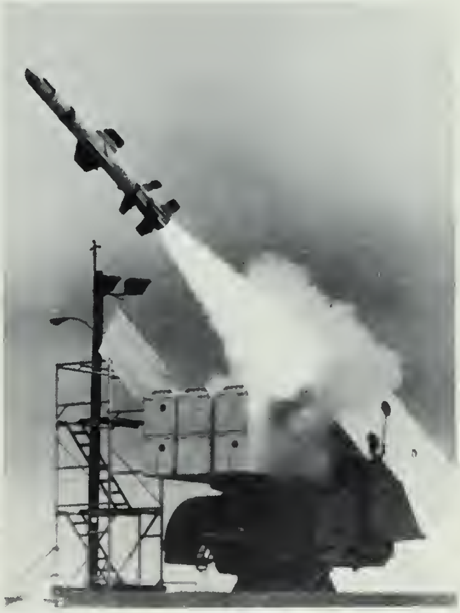

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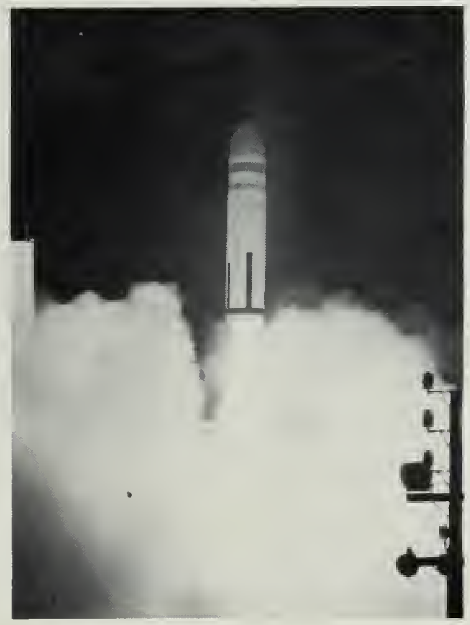

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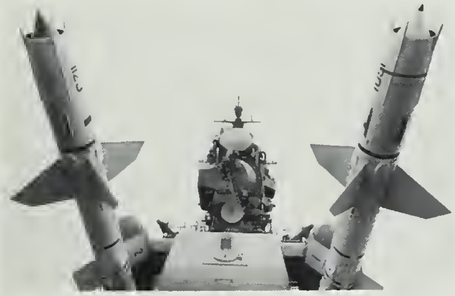

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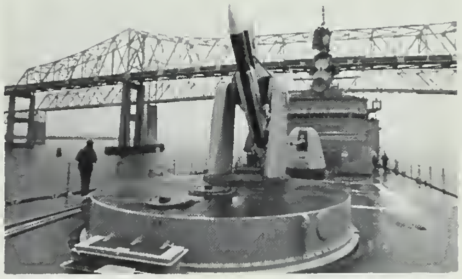

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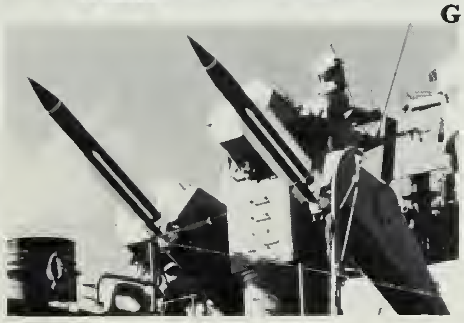

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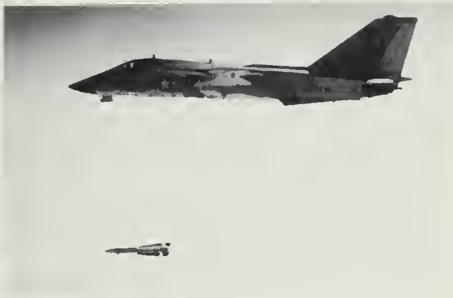

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Answers: A(Sidewinder), B(SM-1 fired from Aegis platform), C(Harpoon), D(Trident), E(Talos), F(Tartar), G(Terrier), H(Phoenix).

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The Soviet Challenge

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ALL HANDS

in this issue:

THE VIEW FROM GITMO

JUNE 1977

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Honor the Flag

June 14th

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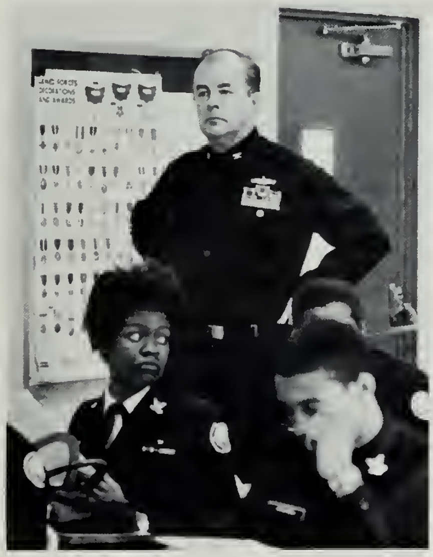

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Left: The 200th birthday of the Nation's flag occurs on June 14, dating from the original resolution adopting the flag on June 14, 1777. (Photo by PH1 Terry Mitchell)
Back: PH2 Outwater went beneath the sea's surface to capture the beauty off the San Diego coast..

Chief of Naval Operations Admiral James L Holloway III
Chief of Information Rear Admiral David M Cooney
Dir Print Media Div (NIRA) Lieutenant Commander O McCurrach
Editor John F Coleman
Production Editor Lieutenant John Alexander
Layout Editor E L Fast
Art Editor Michael Tuffli

Staff LT Bill Ray
JO1 John Yonemura
JO1 Jerry Atchison
JO1 (SS) Peter Sundberg
PH1 Terry Mitchell
JO2 Dan Wheeler
JO2 Davida Matthews
JOSN Francis Bir
Edward Jenkins
Elaine McNeil

Currents

Navy Tracks Giant Iceberg Moving Toward South Atlantic • The Navy Fleet Weather Facility (FLEWEAFAC), Suitland, Md., is tracking a gigantic iceberg nearly the size of Rhode Island that may drift out of Antarctic waters toward South America and into the South Atlantic. The iceberg, one of the largest ever recorded, is 45 miles long and 25 miles wide. Navy weathermen have been tracking this iceberg since 1971. FLEWEAFAC provides sea ice analyses and weather forcasts in the polar regions for the Department of Defense and other U.S. agencies.

Aircraft Carrier Roosevelt Completes Last Deployment • The Navy aircraft carrier that was the first to launch a jet-powered aircraft from her flight deck more than 25 years ago, recently returned from her last deployment. *USS Franklin D. Roosevelt* (CV 42) entered her Mayport, Fla., homeport following a final Mediterranean cruise. President Jimmy Carter extended his personal congratulations to the FDR in a letter to the ship's commanding officer, Captain Richard Bordone: "As one who served at sea and who understands the relationship between a Navyman and his ship, I realize that such an occasion may be sentimental -- But let it not be sad. As each officer and man departs to his new duty, let him carry the spirit of the *Roosevelt* with him. In this way, the great traditions of the Navy may be enriched while new ships and squadrons are strengthened by good people looking to the future." The ship also received congratulatory messages from Secretary of the Navy W. Graham Claytor, Jr., and Chief of Naval Operations Admiral James L. Holloway III. *Franklin D. Roosevelt* will be decommissioned Oct. 1, 1977.

"Space A" Passengers To Pay Tax on MAC Flights • Persons traveling Space Available ("Space A") on Military Airlift Command (MAC) chartered international flights departing CONUS or flying between Alaska or Hawaii and the mainland will have to pay a fee of $5 as of May 1. As a result of a General Accounting Office study, MAC has been directed by the Department of Defense to collect the airport and airway revenue act tax from "Space A" passengers. The tax was previously absorbed by MAC. The $5 fee will cover payment of the tax and the expenses incurred by MAC in its collection. The fee will not be collected from MAC passengers traveling on official business.

Medical Facility's Water To Be Heated By Solar Energy • The first solar energy water heating system in any Naval Medical Facility will be installed this summer in the new Naval Medical/Dental Facility at Cecil Field, Fla. The system, which consists of solar collectors, water pumps and storage tanks, will be in operation by fall. The clinic's existing heating system will serve as a backup.

United States and Soviet Union To Conduct Joint Oceanographic Study • Oceanographers from the United States and the Soviet Union presently are planning a series of joint oceanographic studies called "Polymode." The two countries will study mesoscale eddies (the oceanic equivalent of high and low pressure systems in the atmosphere) in the Atlantic Ocean. Soviet and American scientists will combine resources to distribute a vast array of bottom-moored and floating oceanographic sensors that will measure current velocity, water temperature and other physical characteristics of the ocean's atmosphere. Data collected from the study will be shared by Soviet and U.S. scientists. Polymode will give scientists a better understanding of the effects the ocean's atmosphere has on such phenomenon as the sound wave propagation of sonar. The study is being conducted under the auspices of a US/USSR bilateral agreement on cooperation in oceanographic study.

Naval Research Laboratory X-Ray Detector To Be Launched Into Earth Orbit • Scientists at the Naval Research Laboratory have developed a massive X-Ray detector that will be part of the first High Energy Astronomy Observatory (HEAO) satellite. One of four experiments included in the HEAO instrument payload, the 1,000-pound NRL X-Ray survey array will be the largest space instrument ever flown on any satellite. The array has a sensitivity nearly 100 times greater than any previous spacecraft instrumentation and will map the entire sky within the first six months of operations. HEAO will allow the NRL X-Ray detector to study neutron stars, black holes, quasars, radio galaxies and other celestial phenomena without the interference of the earth's atmosphere. X-Ray astronomy already has detected galaxy clusters out to three billion light years from earth. The NRL X-Ray detector onboard HEAO may extend the reach of observations of clusters of galaxies beyond the range of earthbound telescopes and provide new clues on the evolution of galaxies.

Tightened Screening Procedures Announced For Overseas Assignment • The Bureau of Naval Personnel has tightened screening procedures for overseas duty assignment. All personnel contemplating overseas assignment, and all personnel involved in the assignment process, must follow the new screening procedures. These now include the special requirement for command endorsement for duty at overseas shore activities and non-rotated afloat staffs and ships. These strengthened procedures will minimize the possibility of unqualified personnel being assigned to overseas duty, with consequent personal embarrassment, excessive costs for early return to CONUS, and reduced readiness caused by unplanned gapping of billets. Details are contained in BuPers Note 1300 of 8 April.

Receipts Required For Repayment of Lodging Expenses • Navy personnel traveling anywhere on official business and civilian employees of the Navy traveling in CONUS on official business are now required (effective January 1) to provide receipts for lodging expenses to be repaid by the Navy. A statement of lodging signed by the claimant must be provided when receipts aren't available. The statement must contain locations, dates, names of establishments and amounts spent..

THE COLLECTORS

STORY BY W. B. NICHOLSON
PHOTOS BY J. W. TUCKISH

The sailor, call him PO3 Cal Proctor, sat at the table in the warm afternoon sun basking in the memories of the places he'd visited, and the things he'd seen. Only 23 years old, and he had been to more places than he dreamed possible.

As he reached into his pocket to pay his bill, a well dressed, well-groomed man of about 30 or 35 years of age, approached his table.

"Mind if I join you?" the man asked.

Nodding his assent, Cal said, "You speak English very well. Are you from around here?"

"I studied English in school, and then had ample opportunity to practice it in Southeast Asia. And no, I was born elsewhere."

"Were you in 'Nam?"

"No, Thailand. That was some action, huh? Were you there in '72?"

"No."

"By the way, my name is Walter Schmidt. Yours?"

As Cal answered he fleetingly recalled having seen a security briefing in boot camp about talking to strangers. But Walter, with his modern, European clothes and well groomed appearance, was nothing to worry about. Cal put the thought out of his mind.

The conversation drifted. Cal found he and Walter had a lot in common. Walter said he was a automobile sales representative and Cal had once worked on foreign cars at his uncle's garage. They had visited many of the same ports and had seen many of the same sights. Walter seemed to be a heck of a good guy and, besides, he bought the last two drinks.

It was Walter's suggestion that they have dinner together, and he later insisted on picking up the tab. During dinner Walter asked Cal if he would buy a radio for him from the ship's store as good AM/FM radios were both expensive and difficult to locate.

All in all, it was a pleasant foreign port call for Petty Officer 3rd Class Cal Proctor. The food and drinks were good and the sun was warm. He had enjoyed swapping tales with the car salesman whom he'd just met. Sure, he'd be happy to buy a radio for him at the ship's store.

Cal readily agreed as the wine and good food combined to put him in an agreeable mood. He promised to bring it ashore with him the next day. They were to meet at the same place at 1730.

Cal looked at his watch and saw he had only 30 minutes to get to the landing to catch the last liberty boat back to the ship. He quickly shook hands with Walter, promised to see him the next day, and set off at a jog.

◆

Walter's pleasure in seeing Cal was evident in his smile.

"Hi, Cal. Did you have any trouble getting the radio for me?"

"Heck no. Nobody cares about this," Cal said as he handed over the radio.

Walter removed several bills from his wallet and handed them to Cal. He saw that Walter had given him much more than the radio cost. When he said something about it, Walter commented, "Don't worry about it Cal. The extra is for your trouble. I'm sure you can use it, can't you? And—let's face it—I'm getting a good deal too." Cal could hardly quarrel with that kind of reasoning. Besides, it meant more money in his pocket.

While sitting in an outdoor cafe overlooking the water, conversation drifted from one topic to another. Walter seemed particularly interested when Cal mentioned his mother was born in Czechoslovakia, asking when she left and if she had any relatives still residing there.

It was amazing, as well, the way Walter was able to quickly grasp the more difficult aspects of navigation and engineering. Cal noticed, however, that he was particularly interested in the ship's missile defense system. Later during the evening, Walter commented to Cal that perhaps he would see him at their next port of call.

When Walter mentioned he'd like to have one of the new electronic wrist watches, Cal happily offered to get him one from the ship. At Walter's request, he also expressed his willingness to buy an electric razor for him. As they shook

THE COLLECTORS

hands at the ship's landing, Cal expressed his hope to see Walter again sometime.

He didn't realize it then, but he was to see a lot of Walter over the next six months.

◆

Cal had only been at sea for about 15 days when he got a postcard from Walter thanking him for the opportunity to practice his English again. He also wrote that he hoped to arrange his schedule so they might get together in Durango—Cal's next liberty port. Cal was surprised that Walter was willing to go to such efforts to meet with him. "What the heck," he thought, "I didn't have to spend a cent back there. Maybe 'Walter-the-fish' will foot the bill in Durango, too."

Walter was waiting as the liberty boat tied up at the wharf. He was obviously pleased to see Cal, and as they met he handed him a bottle of brandy made in his own country.

"Did you get me the things I wanted?"

"Yeah," Cal said.

As they toured the city, Walter asked Cal if he would get him a division personnel roster. He quickly explained he could use it in his sales job. Cal immediately consented and, since they were in the area of the fleet landing, he volunteered to get it right away.

Later as he gave the roster to Walter, the man handed him an envelope containing several bills. When Walter asked for a receipt so that he could get his money back ("Routine business expense you know."), Cal gladly signed the paper Walter pushed towards him.

The next day Cal met Walter in a bar not far from the fleet landing. After one glass of wine, Walter got down to business—the *real* business this time: He asked Cal for a publication Cal knew to be classified confidential.

When he objected, Walter became quite stern and said he must have it. He then asked Cal what his CO's reaction would be if he were to receive a copy of the receipt he'd signed after taking the money for the personnel roster.

For a moment, Cal felt trapped but then he thought: "What the heck. It's an old one, out of date and probably won't be missed anyway."

◆

Petty Officer Third Class Calvin Proctor gripped the chair until his knuckles turned white. The blood pounded in his head like a sledge hammer as the trial counsel read the charges of espionage. If only he had thought more about that security briefing he'd had in boot camp at Great Lakes.

Cal was surprised and delighted to see his newfound friend waiting pierside at his ship's next port of call.

If only he had told the XO that he'd met a guy who was asking for official information. If only someone had told him that Walter was a professional spy working for a hostile country, that he hadn't wanted to be his friend and that "easy money" wasn't so easy after all. If only . . .

While this story is fictitious and the photos are posed, it is based on fact. Similar situations happen throughout the world.

These professional "Collectors" are trained to seek out Americans in need of assistance, a "friend" or easy money. There are hundreds of variations of the initial encounter and how it may be pursued. To combat this, you must realize you cannot handle the situation alone, or shrug it off as unimportant. In many cases, either wittingly or unwittingly, you are being used.

If approached, you should report immediately to your commanding officer or executive officer contact of any type with suspicious foreign country citizens; social or official, planned or accidental, in person, through letters or telephone calls.

Similarly, any request for security information by unauthorized persons, whether they are U.S. or foreign citizens, must be reported. Often these "Collectors" will disguise their nationality by claiming citizenship of a country with friendly ties with the United States.

The Naval Investigative Service (NIS) is charged with the responsibility of investigating any attempts by unauthorized

Suddenly the stranger's behavior became stern; a new kind of request was broached.

That long-forgotten briefing at boot camp—if only he'd remembered . . . .

persons to obtain security information and can be consulted regarding questionable situations. Further, the NIS has available a slide presentation entitled "The Collectors" which reinforces the security awareness and responsibilities of our military personnel. This briefing is available at all field offices of the NIS, as well as from the Special Agent Afloat.

Don't place yourself in a position to say, "If only. . . ." ⚓

Fita Fita

BY JO1 RICHARD C. SYLVESTER

Navy Chief Musician Carl T. Alisa retired recently, closing a chapter in Navy musical history little-known today, but well remembered by Navymen in the first half of this century.

In 1947, Alisa, an American Samoan, was one of the last to join the Navy's Fita Fita Guard and Band—a unique group made up of entirely of American Samoans.

The guard and band was created in 1900 when American Samoa was ceded to the United States and put under Navy control. To help govern the group of islands the Navy established Tutuila Naval Station and manned it with a small number of Navy personnel.

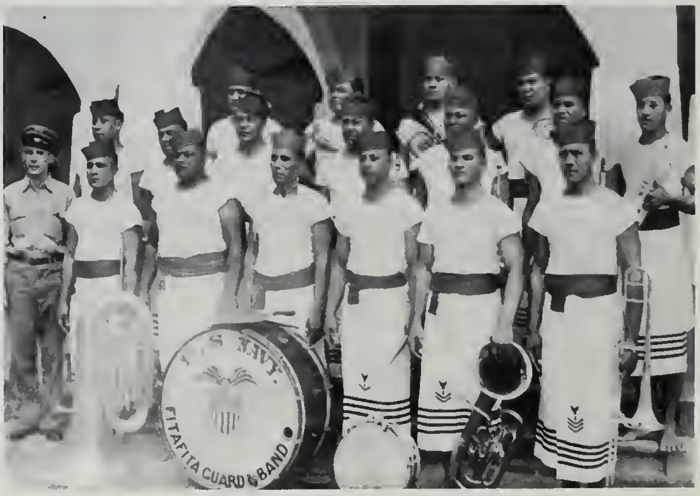
However, instead of bringing in U.S. Marines to perform guard duties and maintain order, a contingent of about 100 Samoans was recruited as regular Navy members to do the job. Twenty musicians were included in that group and as a unit they were dubbed the Fita Fita Guard and Band.

Alisa began his career as a barefoot trumpet player in the Fita Fita band uniformed in white shirts, blue or white lavalavas (wrap-around skirts), with blood-red waistbands and matching turbans.

The guard and band, along with the Naval Station, was disestablished in 1951 when administration of American Samoa was transferred from the Navy to the Department of the Interior. Alisa and other members of the 'Fita' were reassigned to Navy billets in Hawaii and on the West Coast. For a few years some members stationed in Hawaii performed native Samoan music and dances, but as Alisa said, "The spirit stayed in Samoa."

"To join the Fita became a dream of many young Samoans," he said. "The Navy was very selective. I was lucky. When I applied for the band its solo trumpeter was retiring, and after auditioning I was accepted."

The memory of the Fita Fita Guard and Band, which Alisa said was a "great opportunity for generations of Samoans," will remain with anyone who ever saw or heard it. But with the chief's retirement that memory will have to be carried on apart from the Navy the Fita served for so long. ⚓



Your Link with Home

BY JO1 JOHN YONEMURA

"Dear son . . . Mother and I were so proud to read about you in the newspaper today. . . ."

Ever get a letter like that from home? Every sailor should. Did you know that within a four-year enlistment, the average Navy man or woman can have up to six stories in his home town newspaper?

If you would like your family and friends to read about you—even hear your voice on the local radio station—just be sure to fill out a Home Town Release form (NAVSO 5724/1) at the next opportunity. This form should be in your check-in package (at every duty station) or available from your command's public affairs office. Filling out the form is strictly voluntary as specified in the Privacy Act and spelled out on each form.

Stories that are considered ideal "hometowners" are boot camp and school graduations, promotions, first reenlistments, awards ceremonies, reporting aboard new duty stations, deployments, special fleet exercises, off-duty scholastic accomplishments, and sports achievements (All-Navy competition and higher).

With the cooperation of your public affairs office the Fleet Home Town News Center (FHTNC) will ensure that the story gets home.

"The reporting aboard slant is one of our good stories," said Commander William J. North, director of FHTNC. "We get a lot of them, but we don't get enough."

The Center receives notice of less

than 25 per cent of all promotions in the Navy. "If anything is going to get run, it's the promotion story," said CDR North. "Even the tightest newspaper will get it in; I have been told this many times."

The Center sends news releases to more than 40,000 communities in the 50 states and also American Samoa, the Virgin Islands and Guam. Unfortunately, releases on Navy people from the Republic of the Philippines and Puerto Rico cannot be processed because of the scarcity of English-language newspapers, and these focus on national and international news.

Located in Building X-18, near the Supply Center piers, FHTNC moved to Norfolk Naval Base in January 1976. Because the building previously housed the Personnel Accounting Machine Installation, Atlantic, very little renovation was necessary and the proper electrical outlets and power was readily available for the Center's high speed word-processing system.

FHTNC distributes home town news for the Marine Corps and Coast Guard as well as the Navy. The three officers assisting CDR North and the 23 enlisted personnel represent all five military services; 11 civilian employees complete the staff. Although the Army and Air Force have their own home town news services, soldiers and airmen augment the High School News Service (HSNS) staff, another segment of the Center. The HSNS puts out *Profile* Magazine, an educational magazine used by high school counselors to provide military information to students throughout the country.

The Center receives about 1,000 news release forms each day, covering activities of Navy men and women worldwide. Navy Senior Chief Journalist Terry Reilly first screens them for completeness and newsworthiness. They are then classified and coded by Marine Cpls Bobby White and Lowell Fourman. Cathode ray tube (CRT) operators, like civilian worker Joyce Miller, then type the pertinent codes and facts into the computer system.

Ninety-five per cent of all releases are standard, recurring type stories. When release forms for an event such as a boot camp graduation are received at the Center, a computer matches up name with an appropriate "stock" story. Then the computer feeds out individualized news releases on each participating graduate at a rate of 440 lines per minute, producing about 100,000 releases per month.

The other five per cent of the stories is made up of specials which require journalists at FHTNC to originate the releases.

When a ship is scheduled to deploy, the ship's public affairs officer sends all completed forms he has received from crewmembers to FHTNC. This constitutes a "hold file," updated every 60 days. Journalist 3rd Class Diane Washington maintains anywhere between 70 and 100 hold files at any given time.

The Center produces news releases on exercises, port visits and the like as they occur and sends them to media outlets in each man's home town or area. This does not mean that there will be only one release per form. A sailor from Chicago, for example, could have as many as 18 releases for each newsworthy event because of numerous small radio stations and neighborhood newspapers, besides the big dailies, serving the city.

Radio stations like to receive taped interviews concerning their native sons. Ship and station public affairs offices are provided instructions on producing taped interviews by the Center. Most cassette recorders can produce cassette tapes of sufficient quality for broadcast, and some Navy people have even produced their own interviews. The submissions should be handled by the public affairs office, however, and guidelines should be observed.

Photographs can be included with the Home Town News Release forms. As long as the photos are no larger than three by seven inches, they can be attached (taped) onto the folded news releases when mailed.

Postal regulations forbid the mailing of unsolicited material to the media. For this reason, FHTNC writes to more than 45,000 media outlets each year; about 10,000 are now subscribing to the Center.

Giving Navy men and women recognition in their home towns originally was the idea of Fleet Admiral Chester W. Nimitz during World War II. Believing that Americans back home wanted to know the exploits of individual sailors, he started a "Home Town News Section" in his public relations section at Pacific Fleet Headquarters in Pearl Harbor.

In 1945, then Secretary of the Navy James V. Forrestal established the Fleet Home Town News Center so that the entire Navy would be able to make use of this service.

Before its move to Norfolk, FHTNC was originally located in Great Lakes (and formerly in Chicago). "Now we are really where we belong," CDR North said. "We are with the fleet at the largest naval complex in the world."

FHTNC continues to expand. Just last month, Master Chief Journalist Tom Stuart became the first West Coast liaison representative for FHTNC at San Diego. His job is to assist public affairs officers in the Pacific with their Fleet Home Town News programs.

About one-and-a-half million stories were released in 1976 with an estimated 80-90 per cent being used by newspapers and radio stations. The Center is expected to release up to two million stories this year.

There are fringe benefits for the commands and the Navy overall, but our single effort is recognition of our most valuable asset— the individual Navy person. ⚓

Armed forces report
esidents serving in the mili

GITMO

ISLAND ON AN ISLAND

STORY BY JO2 DAN WHEELER
PHOTOS BY PH1
TERRY MITCHELL

"I hate the pre-frozen bread they sell in the commissary! Everytime I try to spread peanut butter on it, I end up with torn bread, sticky fingers and a handful of gooey crumbs."

Well, no one likes *everything* about duty at U. S. Naval Base, Guantanamo Bay, yet—like SMCM E. J. Chambless, the bread hater—most are hard pressed to cite significant complaints on a moment's notice. In fact, most complaints pale in light of the unique life at Gitmo.

Located on the southeastern tip of communist Cuba, Guantanamo Naval Base is literally an island on an island. Originally leased from the Cuban government in 1903—renewed in 1934 for an annual rent of $4,000—the base has been nearly self-sufficient since the early 1960s when the United States severed diplomatic relations with Castro's regime.

In spite of having to provide all the necessities for day-to-day living for its residents, Gitmo manages to survive and prosper while fulfilling its main mission—refresher training for the men of the Atlantic Fleet.

Though most fleet sailors and officers experience only the training side of Guantanamo, there is another equally important side to Gitmo—life on the "Rock." The naval base covers an area 45 miles square and 14 of those are water. In that compressed area lives a thriving community of Navy and civilian personnel and their families—6,500 strong.

They live in what might be called Cuba's Sahara. The lush greenness typical of communist Cuba is not evident in the arid brownness characteristic of Gitmo. The base rarely gets rainfall because few storm clouds survive their trek over the Sierra Maestra Mountains separating the base from the rest of the island. Consequently, cactus, tumbleweed, tarantulas, scorpions and land crabs abound in the fields and hilly country near the base's perimeter.

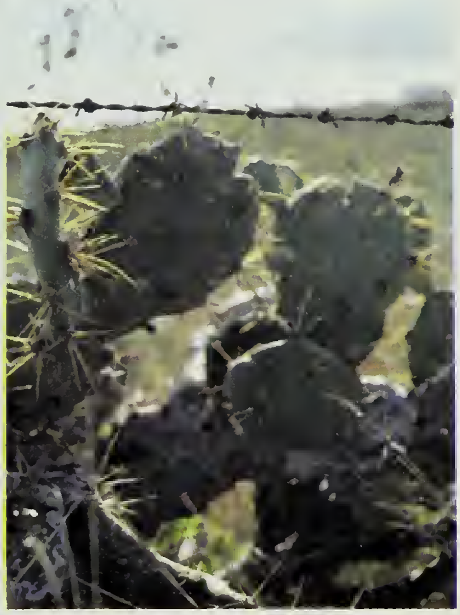
"We don't encourage residents to walk unescorted out near the fenceline because it's rough terrain and, of course, there are the landmines," said EMC F. J. Wells, one of the chiefs who conducts base tours. "In addition to established mine fields, we've found mines that date back to the Spanish-American War and before."

More apparent dangers are visible to the visitor. Instead of deer crossing signs, Gitmo posts tank crossings along its roads. "You have to be on the lookout for them when you're driving outside 'downtown'," Chief Wells said. "They can't stop for you, but you'd better stop for them."

Wide dirt roads carved into the hilly terrain—which on other bases might be used by bikers and horseback riders—are traveled by tanks and heavy military equipment during base defense exercises. Some serve double duty as firebreaks during especially dry periods. Bunkers and lookout towers dot the perimeter, and 17.4 miles of fenceline separate Gitmo from "no man's land"—that area a few hundred feet wide between the American and Cuban fences and fortifications.

"Active duty personnel, of course, are always aware that we border a hostile communist country," said Captain John H. McConnell, base commander, "but I don't think most others—wives, children, and civilians — even think about it."

According to mechanics at Guantanamo's lone service station, base personnel are more likely to fear the



Top left: Completion of evening colors; fences show why Guantanamo Naval Base is "an island on an island." Top right: Minimal annual rainfall makes Gitmo the "Sahara of Cuba." Though there is greenery on base, cacti and desert flowers predominate. Above: Ships in training are in deep water only minutes after leaving port, making Gitmo the finest "training ground" for the Atlantic Fleet.

threat of a shortage of replacement parts for Gitmo's Specials and family vehicles. A Special is a motorized vehicle—you really couldn't call it a car—constructed out of abandoned parts salvaged in part or totally from "Sears"—the base's metal junkyard.

By way of explanation, all metal renewals whether they come from a washing machine that no longer washes or a pickup that no longer picks up eventually find their way to "Sears." Once there, they become community property; everyone makes a scavenger run at least once during his tour of duty. "I always check Sears first," said YN1 S. Smythe. "You get a better deal there than at the exchange and many parts are more readily available!"

These Gitmo bailing wire beauties sell for about $300 as long as they run; none, however, can be taken off the island. Like many clunkers chugging around base, Gitmo Specials are passed on from one group to another of Gitmo residents.

One of many proud owners is HT2 Floyd Hokes who built his Gitmobile from the body of an abandoned English Ford. "I took the body and chopped it down with a hammer and chisel and then covered it with plywood and safety equipment." (All specials must have bumpers, lights, windshield wipers, key ignitions and mufflers.) "Mine needs a little more work before I can legally put it back on the road," Hokes said.

Gitmo Specials are so common on base that they rarely draw any attention as they cruise the base's 300 miles of paved roads. Some people wouldn't willingly be caught dead in one. "I drove mine to school to pick up my daughter," Hokes said, "and she was embarrassed nearly to death. She told me, 'Don't you ever pick me up again in that chest-of-drawers!' "

Top: Dangerous currents and sea predators necessitate "pooled in" swimming areas. Though they appear shallow, areas provide water deep enough for amateur snorkeling and underwater swimming. Above: Greens appear to be oases in a desert. Fairways are watered only by rain; greens, however, receive 30,000 gallons of water daily.

The main off-duty attraction is the year-round water sports. Gitmo is a land of beaches and clear turquoise water—water so clean that the ocean floor, when 20 feet below, appears to be only inches away. Every beach has a dredged and pooled-in swimming area to protect bathers from the undertow and swift current prevalent in Guantanamo Bay. Swimmers are encouraged to wear some type of shoes while wading to protect their feet from sea urchins and coral; everyone is cautioned not to wear anything shiny while wading to avoid attracting predator fish.

The bay and ocean around the base teem with game fish, baracuda and sharks included, but there has never been an attack on man in the 74-year history of the base.

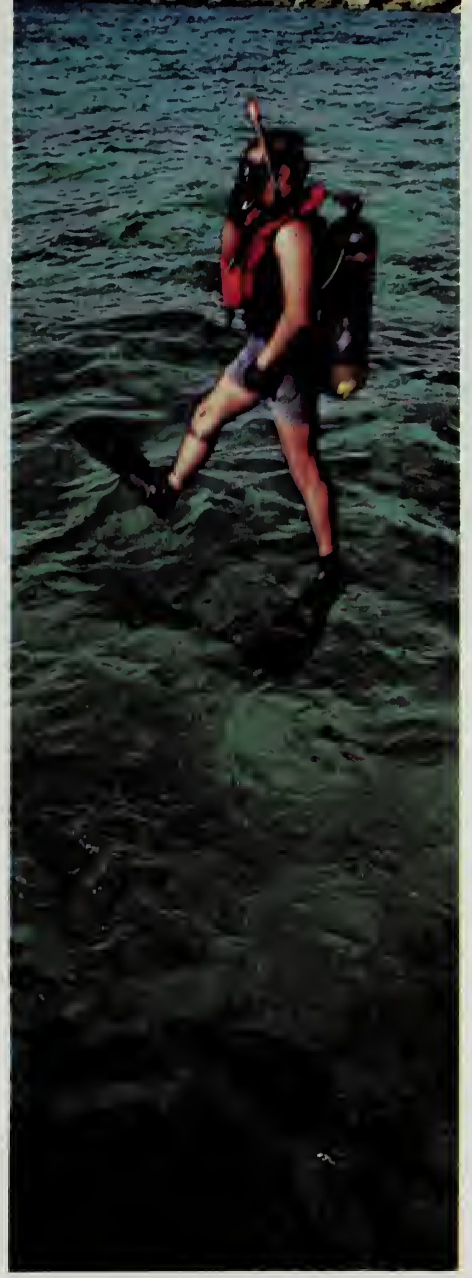
There are shark sightings however—they have become suspiciously common since the movie "Jaws" played at the base's theaters. In fact, local folklore tells of Gitmo's own version of Jaws, called Midnight Express. Reputed by fishermen to be between 18 and 25 feet long (depending on how much tackle was lost), Midnight Express is said to be a shark which regularly cruises into the bay in search of food. One fisherman tells the story, with obvious delight, of how several Marines intended to land the leviathan by hooking it with heavy line attached to their jeep. "They hooked it allright," he said, "and nearly lost their jeep trying to unhook it before Midnight pulled them all into the drink!"

But don't get the idea that Gitmo is all swimming and fishing. "Down here, people are on duty 24 hours a day, seven days a week," said Commander C. E. Fleury, executive officer of the Naval Station. "One shouldn't get the idea that it's all fun and games just because the weather is good and there are lots of recreation facilities. This isn't bonus duty by a long shot, especially for the unaccompanied man or woman. It's isolated and much of the housing is not on par with that stateside."

Since residents (with the exception of 149 Cuban commuters) are not allowed to leave the base unless they're going back to the states or on an R and R trip, the naval station caters to most of their needs. Things which on other bases normally fall within the purview of civilian organizations or separate commands are handled by Gitmo's "housekeeper."

"People never get away from us," CDR Fleury said, "and not only don't they get away, but we cater to our people totally. If the light in their kitchen stops working or their plumbing backs up, they can't call the electric company or the plumber—it's the naval station's problem. The normal stateside naval base has a public works center, a supply center, a communications center and the like, and all of these facilities are separate commands. At Gitmo, they are departments of the naval station. We are like the one-stop unrep service provided by an AOE. We're the AOE ashore."

There are several major commands at the Guantanamo naval base, but most of the major housekeeping chores fall to the Naval Station Commander, Captain David W. DeCook. "We have



Far left: Diving is popular on the "Rock." Left: John Sligh is the local farrier. Below: Two of Sligh's 40 regular customers await a fitting.

the water plant, the electric plant, the radio and TV stations . . . just about everything that makes life pleasant here is our responsibility," CAPT DeCook said.

Among the things that make life pleasant are the facilities of Special Services. There is an 18-hole golf course which was once billed "the plushest course in the Caribbean" and though no longer plush, it is still unique. Today it looks like a desert with 18 oases on it—each oasis (a putting green) is watered daily, thanks to a daily allocation of 30,000 gallons of fresh water; the fairways, however, are scorched by the tropical sun.

The water used by the golf course is a small portion of the more than two million gallons produced daily at the base's desalinization plants. The first of these four plants was put in operation in 1964 when Castro cut off the base's water supply from Cuba. Since then, Gitmo has produced all of its fresh water and electricity.

Other recreation facilities include fresh water swimming pools, bowling lanes, tennis courts, an archery range, horseback riding, diving and membership in any one of dozens of special interest clubs. There are four open air theaters and three more at various clubs, all free. Though the base is small, there is plenty of wildlife and each year there is a hunting season for deer, dove, and pigeon, among others.

Most families don't rely on wild game to fill their refrigerators—they depend on SeaTrain, a containerized cargo ship which brings fresh food, produce and other supplies every two weeks. When the SeaTrain arrives—regardless of the hour or day — the commissary stays open (or reopens) for the sale of produce.

"Back in the states, I went without lettuce salads frequently, but down here I have them for one week and go without the next," said one sailor. "It's only when you don't have salads that you miss them. It's a lot like milk at sea—in port you wouldn't touch the stuff; underway, you can't get enough of it and complain when it's gone."

Many residents till their own small vegetable gardens to make their produce last. "Mine produces tomatoes

Below: Typical Gitmo Special displayed by its owner, Floyd Hokes. Right: Housing is comfortable, though quantity is limited.

and peppers," Master Chief Chambless said. "Some of these plants just keep on producing throughout the year because of the weather. Try doing that in the states!"

Other gardeners aren't always so pleased. The topsoil is only about a foot deep and the coral underneath causes problems. "There must have been a mountain under my quarters at one time," grumbled on sailor. "If you want to fence your garden off, you'll have a devil of a time driving in a fencepost. I think a stick of dynamite is much more practical than a post hole digger around here."

Other than fresh produce, there is rarely a shortage of any type of food. Still, if you see an item in the commissary that you want, you buy it immediately. "It won't be there tomorrow," said one shopper. "One time I was looking at a roast and turned my head for only a second. When I looked again, it was gone!"

In spite of a fairly good selection, many shoppers do miss certain fast foods available commercially in the states. "If someone told me they were flying in a planeload of Southern Fried Chicken or Big Macs," said BM3 Robert Fitzgerald, "I'd say, 'Put those groceries back on the shelf, Honey. We're headin' for the airport!"

The Navy Exchange coffee shop does have a two-patty hamburger called the Gitmo Burger which rivals the fast food stateside, yet some people still prefer fast food from home. "I have a friend who takes R and R back to the states regularly," said LTJG Daniel S. Collier, a helicopter pilot. "He brings back a cooler full of hamburgers for me. Just pop them in the ol' microwave and they taste great."

Left: Biker tries his luck at the biweekly motocross. Above: The only stoplight on base.

Gitmo has virtually no private enterprise. All the service clubs, shops, food stores, and restaurants are run by the Navy Exchange or Special Services. Because of the lack of places to spend your money, many people are able to save quite a bit during their tour. "It's not that anything is especially cheaper," said one, "it's just that it's not available."

Even something as mundane as buying a new shirt can take on increased significance in Gitmo. "In the states, it would involve one trip to a shopping mall," said CDR Fleury. "If one store didn't have the right size, style or

GITMO

color, you would simply go elsewhere. That's not the case here. For instance, I don't say, 'Today, I'm going to buy a shirt.' Indeed, I say, 'Today I'm going to *start* buying a shirt!' and then I make my first trip to the Exchange and check out the selection. I may spend three months making the selection, just waiting for the right shirt. Of course, I may find it on the first trip. In any case, that's the way you cope—you have to learn to live with existing conditions."

Some of those conditions are pleasant, some not. Here is a partial listing of the more unusual aspects of life on the island:

- Though Gitmo is isolated, travel is possible and free through the R and R program. Residents (military and civilian) have regular opportunities to fly to Haiti, Jamaica or Puerto Rico, for a day of liberty or several weeks of leave.
- Automobile insurance is inexpensive by any standard—about $30 a year for liability and $45 for collision coverage.
- All visitors arriving at Gitmo for other than Refresher Training, fly in on a MAC flight originating in Norfolk, Va. and land at the Naval Air Station on the Leeward side of the base. Gitmo is divided into two sections, Leeward (where the MAC terminal and VC-10 are located) and Windward (comparable to "mainside" at a stateside base).
- There is a downtown which boasts a rush hour that lasts 10 minutes a day, and a traffic light—the only one on base.
- Every resident is allowed one call home per week via satellite communications. The call is placed through Norfolk and is collect from that point.
- Gitmo has a hurricane season from June to November. Some housing is hurricane-proof and some is not. Hurricane-proof housing has concrete slab roofs and reinforced glass or metal louvered windows. Nonhurricane-proof housing has pane glass windows. If a hurricane threatens, all those in unprotected housing must move in with friends who live in hurricane-proof quarters, or they live in a hurricane shelter until the storm warning is over.
- Gitmo was the first Navy base in the world to install color TV. AFRTS operates three radio stations and a TV station seven days a week. One of the radio stations offers 24-hour news, thanks to a direct news link with ARFTS in Washington, D. C.

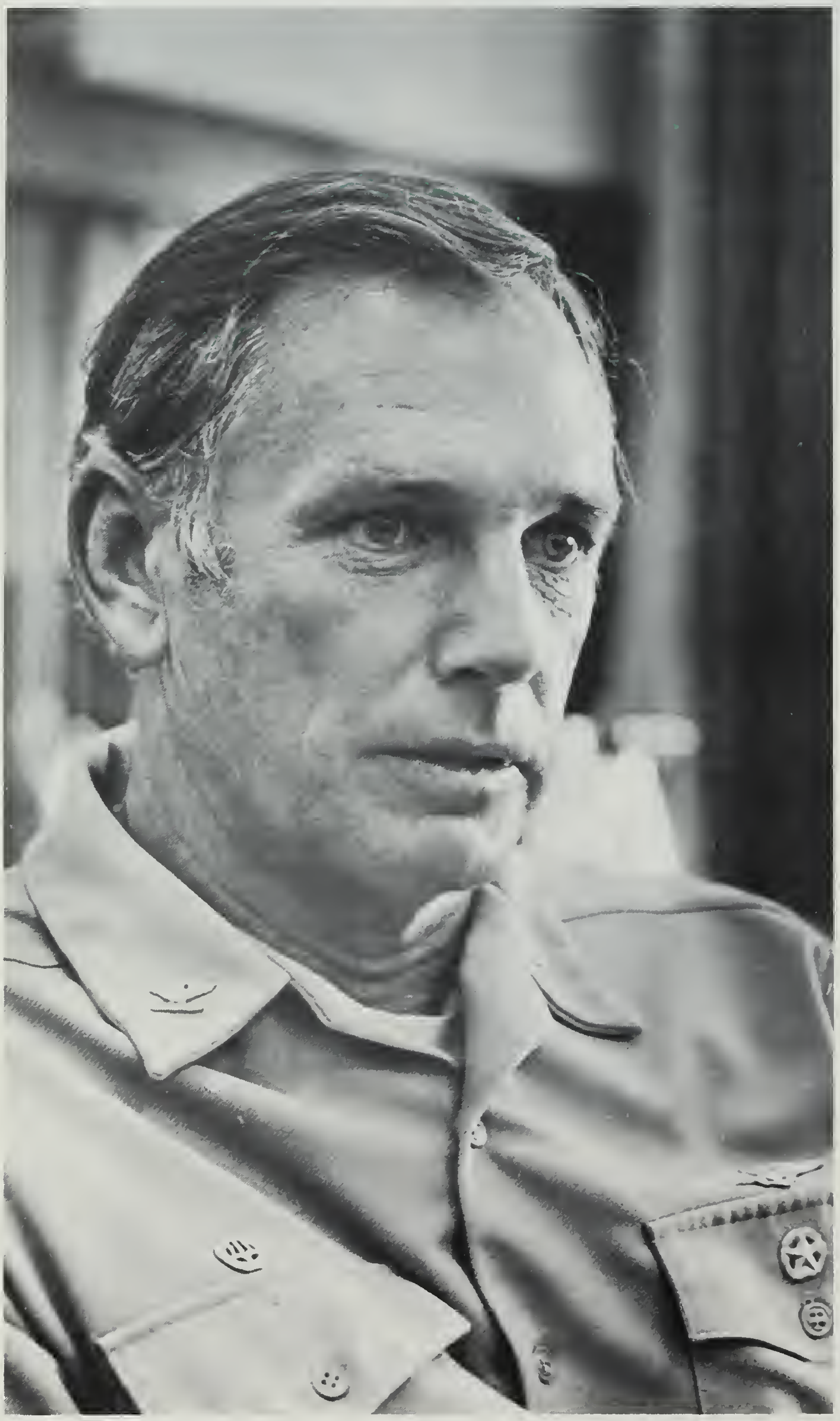
"...a rush hour that lasts 10 minutes a day, and a traffic light--the only one on base."

- Gitmo publishes the only "daily" (actually five days a week) base newspaper in the Navy. It features national and international news along with Navy and local news.
- Gitmo has a woman mayor. Mrs. Judy Goodbar was elected mayor by the Guantanamo Bay Naval Base Civic Council and, as such, has a direct line to the commanding officer and department heads in charge of various facilities on base. Her job is to bring residents' problems to the attention of the proper authority and seek solutions to problems with wide community concern. The council has been in existence since the late 1960s and is dedicated to improving life in general on the island.
- Though Gitmo is a tropical base, the weather is not always warm. While the states were suffering through the worst winter of the century, Gitmo was frigid also—one day the wind chill factor drove the temperature down to a near 58 degrees and heavy winter coats, smelling of mothballs, were seen everywhere.

"All in all, I think people enjoy their tour of duty here," CAPT DeCook said. "People try to make life as pleasant as possible in spite of various hardships and they work together to keep each others' morale high. Even so, it boils down to this: The attitude you have when you get off that C-141 at the air station determines what your tour will be like at Gitmo." ⚓

LIFE ON THE ROCK

An interview with Commanding Officer, Guantanamo Bay, Cuba



Gitmo. To Atlantic Fleet sailors and officers that means training, hard training around-the-clock with precious little time for liberty or relaxation. That's what they're there for; that's what they expect. But what about the 6,500 poeple who live on the "rock"—the ones who call Gitmo "home"? ALL HANDS recently asked Navy Captain John H. McConnell, Commander, U.S. Naval Base, Guantanamo Bay, Cuba, about the living conditions.

Q. Capt. McConnell, a major magazine once called Guantanamo Bay Naval Base a "28,000-acre amusement park." What was your reaction to that?

A. Violent. There are a lot of people here who work 72-hour weeks and I am sure they don't think Gitmo is an amusement park. They're not all senior officers either. Take the sailors who run the ferry across the bay seven days a week—I believe they resent that sort of allegation. The instructor/observers (I/Os) at FTG are another example. Many mornings they are on the job at 0400 and frequently put in 14-hour days.

I have heard Guantanamo referred to as some kind of extended vacation. It's not. Anyone can see how hard the ships' crews work while undergoing refresher or shakedown training. That means someone else must work hard to support and train them; that "someone" is FTG, supply, port services and all the other base activities that support the fleet. The other men and women here support that operation on an around-the-clock basis. My operations people, for instance, are often in the office until 0200 handling emergencies and routine business. The people at Guantanamo work as hard at their jobs as people do anywhere in the Navy.

Q. Given the working conditions and demands placed on each member of the team, how would you rate the morale of people at Gitmo?

A. Morale is good and I'm not at all surprised that it is. Each time visitors come here from other overseas bases, they remark about our high morale. I think a lot of it is related to our confined circumstances. There is no way to get off the base at the end of the day. We're all thrown together and everyone seems to be trying to make the best of it.

There are other reasons, of course. One is Gitmo's relatively small size—it affords the opportunity for more responsibility rank for rank, and rate for rate than elsewhere. The senior officer here is a captain. Consequently, first class petty officers here have a great deal more responsibility—probably more than they would have at another large base, and so on down the line. That's an important satisfaction feature.

Q. As commander of a naval base which is actually an isolated city, what unique roles do you play that a stateside CO wouldn't?

A. The primary difference here is that nobody leaves the base to go home after work. Therefore, all problems are base problems.

All base commanders have certain functions which resemble those of a mayor. Here there are simply more of them. For instance, I'm heavily involved with school boards, community, civic and recreational councils. The staff must also get more intimately involved in such operations as the commissary—it's the only grocery store here—when people have problems, we hear about them.

Since the Military Airlift Command (MAC) provides the only scheduled transportation in or out of Gitmo, we have to ensure that people can get in or out anytime as circumstances dictate; they must be secure in this knowledge. Additionally, we have to be concerned with transportation requirements for emergencies, TAD trips, regular leave and R and R.

Q. How does your Rest and Recreation Program work?

A. On a periodic basis we fly embassy personnel from Kingston and Port-au-Prince here to use the commissary, exchanges, and other services. On those days, we can send some of our people to Haiti or Jamaica for the day. It's just a one day affair, but most people enjoy the outing.

The military on base can ride Navy ships to other ports in the Caribbean. Most of the ships in training here are scheduled for Caribbean liberty about midway in their training and some of our male personnel can go with them. The policy now is not to take dependents or military women in ships headed to liberty ports except when it's possible to go in Coast Guard ships.

Q. How would you describe the availability of housing?

A. The list is exceedingly long. Even though we tell people before they come that, in some cases, they may have up to an eight-month wait for housing on an accompanied tour, they sometimes arrive with an overly optimistic attitude. We hope to be able to shorten the wait in the future.

Q. Does Gitmo's unique situation result in many unusual laws and regulations here?

A. Yes, there are a few necessitated by our location and special problems. For instance, all small craft, including privately owned boats, must fly a U. S. flag so they are readily identifiable as being ours.

Energy conservation, while important everywhere, is critical here. There are watering hours governing when you can water your lawn or wash your car. Also, water allocations are strictly enforced for official purposes like the Special Services golf course and nursery. Office air conditioning can be used only during certain periods of the day. Availability of water and electricity is one consideration, but perhaps more important is the tremendous cost of fuel needed to operate our desalinization plants which provide that water and electricity. We conserve wherever possible.

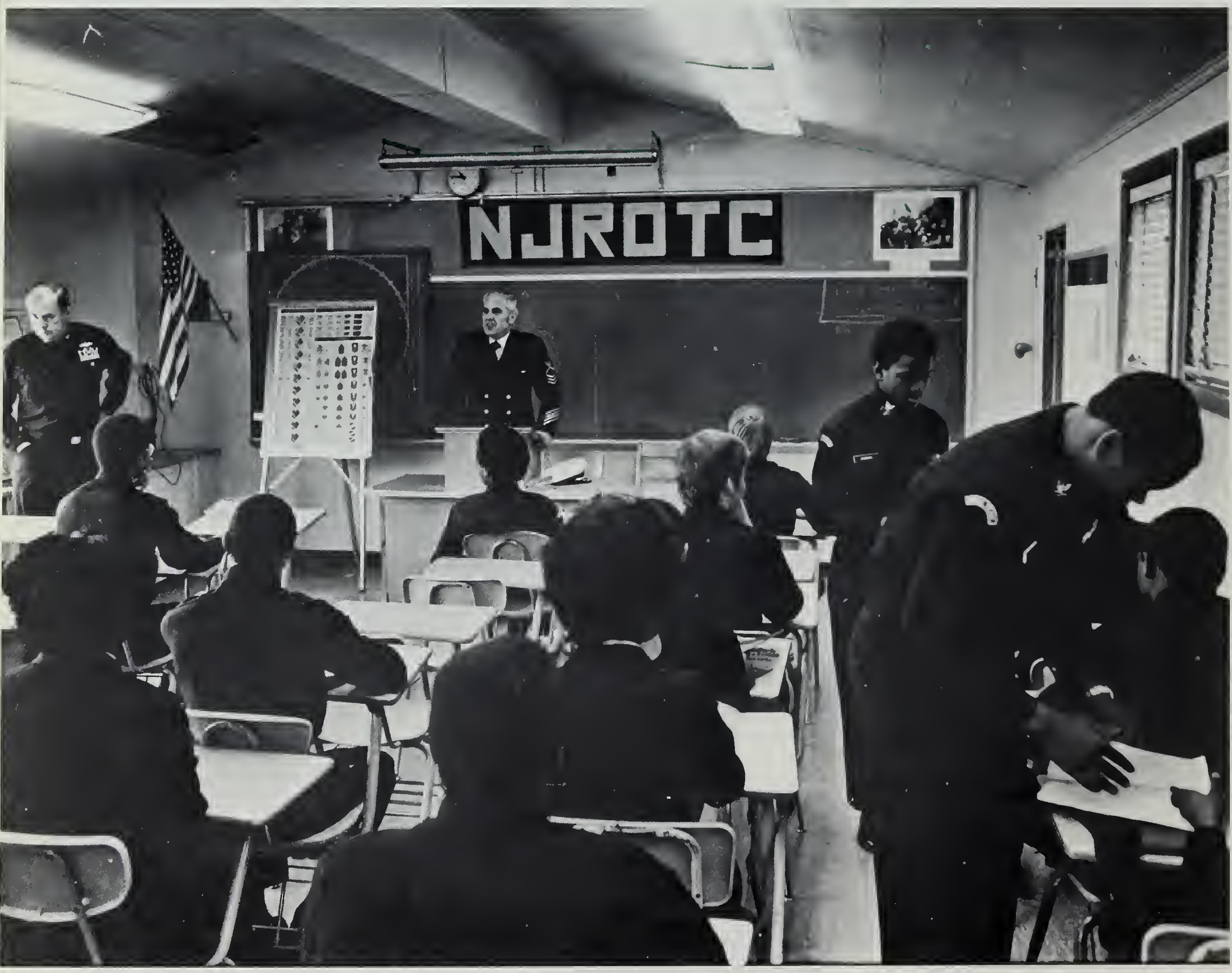
Q. Do people seem concerned about living so close to a communist country?

A. I think most people—spouses, children and civilians as well—don't even think about it. Active duty military, of course, are aware that we are surrounded by a hostile communist country. However, there haven't been any confrontations in a long time. We remain prepared; we stay ready and man the fenceline; we comply with the provisions of our operation plans governing defense of the base. We have regular training drills and exercises. Nearly all of our people are trained to perform base defense functions.

Q. One final question, captain. Why does Gitmo—a base with only two main drags and a five-minute rush hour—have a stoplight?

A. We needed it. During the rush hour that intersection requires traffic regulation. The thought originally was that it would be nice to have a traffic light for those who haven't been to the states for some time so they wouldn't forget what one looks like. ⚓

Getting a head start through NJROTC



BY JO1 JERRY ATCHISON

"I guess you could say I'm hooked," the high school student said. "I sat in on one class just to see what it was like, decided I liked what I saw and joined up. I haven't regretted it."

What this high school student shares with some 28,000 others around the United States is membership in the Navy Junior Reserve Officers Training Program (NJROTC).

It's always a good idea to get a head start and that's what the NJROTC program—offered at more than 200 high schools—is all about. High school students are getting a chance to take a close-up look at the Navy and receive credit towards their high school diplomas at the same time.

Currently, about 213 public and parochial high schools in the United States and Guam are offering the NJROTC curriculum as an elective science course. (The number of schools permitted to offer the program is mandated by Congress.)

Where the program is offered, membership is open to all students in the last three years of high school who qualify, physically and mentally, for the program. A few schools have a four-year program.

Students join the program for a variety of reasons. But here's what all who satisfactorily participate in the program get out of it:

- NJROTC affiliated schools grant a minimum of one credit (elective or science) toward graduation for each year completed successfully.

Facing Page: NJROTC students at Northwestern Senior High School, Hyattsville, Md. Right: Awaiting the inspecting officer.

- Field trips to Naval Stations and cruises on Navy vessels during the school year are part of the program offered at many schools.
- NJROTC extracurricular activities include membership in drill teams, NJROTC Bands, and Rifle Teams.

The Navy provides the school and the student all books, drill rifles, training aids and equipment needed for the Naval Science courses. Cadets are outfitted with uniforms similar to those worn by the Naval Academy and college NJROTC midshipmen. The uniform is worn as the Naval Science instructor directs in accordance with policies approved by the school.

Each participating high school is provided funds for operating expenses, on a reimbursable basis, to include: Navy's portion of NJROTC instructors' salaries, transportation for the field trip/cruise program, uniform alterations and maintenance, and miscellaneous items such as office supplies and postage.

For those who decide a career in the Navy might be for them, NJROTC provides valuable preparation for students interested in advanced Navy programs. Appointments to the Naval Academy, and NROTC college scholarships are available to outstanding NJROTC cadets.

After successfully completing the three-year high school program, cadets desiring to enlist in the Navy can do so at the advanced pay grade of E-3, a head start toward future promotions and pay raises.

But perhaps one of the most rewarding experiences for many NJROTC

Right: An NJROTC student ponders an assignment. Opposite Page: RADM Lando W. Zech, Jr., Chief of Naval Technical Training, inspects NJROTC students at Millington, Tenn., Central High School.

students is the exposure to highly-qualified retired naval officers and petty officers who teach the NJROTC courses.

NJROTC instructors are selected and approved by the Chief of Naval Education and Training. They are part of the school faculty and enjoy the privileges and prestige accorded regular teachers.

And well they should because the NJROTC curriculum is a demanding one. The curriculum was developed with the cooperation of many secondary school administrators, teachers, curriculum experts, education advisors, civic leaders and Navy personnel. It is constantly being updated and improved, and is designed to appeal to young men and women in high school.

But the advantages of the NJROTC program do not only accrue to the student. In the end, it is the Navy that benefits greatly from the program.

Most who enter the Navy each year experience a certain culture shock as they adjust to the unaccustomed life of the military. Not so with the

NJROTC student who has already begun the process of acclimatizing before entering either boot camp or Officer's Candidate School.

Those who "taste" Navy life in NJROTC also enjoy the option, should they find it not to their liking, of choosing against a career or Navy tour before becoming committed to an enlistment contract.

When the Navy began NJROTC in 1967, Navy leaders anticipated developing a program that would prove a good source of tomorrow's Navy officers and petty officers. Recent reports

Requirements for NJROTC

To meet the eligibility requirements for enrollment as a cadet in the Naval Junior ROTC Program, a student must:

- be a citizen of the United States;
- be 14 years of age or older;
- be in good academic standing in school;
- be physically able to participate in the physical education program of the school;
- be selected by the Naval Science instructor and school officials;
- successfully pass any screening tests prescribed.

Foreign students, with the permission of their governments, and others who do not meet the above requirements may be enrolled, in many cases, as Special Students.

Girls who qualify may enroll as cadets or may participate in the program as sponsors in accordance with established procedures.

indicate the program has exceeded all predictions.

Today, Navy men and women who got their first exposure to the Navy through the NJROTC program are attending the Naval Academy, serving at sea and ashore in positions of responsibility or attending one of the many NROTC college scholarship programs around the country.

NJROTC can't claim sole responsibility for the success of these Navy men and women. But it has certainly contributed to their success, if only in having fulfilled its stated mission: "To give teenagers a head start on developing citizenship, leadership, teamwork and high standards of personal conduct and appearance." ⚓

Opposite Page: RADM Zech addresses NJROTC students following inspection. Left: Captain Dale Brumbaugh surveys the situation at Northwestern Senior High School, Hyattsville, Md. Below: Drill team shows its skills.

Subjects Covered in NJROTC Program

Sophomore Year—Naval Science I

- Basic Naval Orientation
- Organization of the Navy
- Operating Forces of the Navy
- Naval History (early)
- Naval History (to World War II)
- Seamanship
- Introduction to Navigation
- Leadership
- Leadership laboratory

Junior Year—Naval Science II

- Adventures in Science
  - *Oceanography*
  - *Meteorology*
- Navigation
  - *Aids to Navigation*
  - *Piloting*
- Rules of the Nautical Road
- Naval History (World War II)
- Leadership
- Leadership laboratory

Senior Year—Naval Science III

- Adventures in Science—Astronomy
- Navigation
  - *Relative Motion*
  - *Introduction to Celestial Navigation*
- Naval History (after World War II)
- Electronics in the Modern Navy
  - *Elementary Communications*
  - *Principles of Radar and Sonar*
- Leadership
- Leadership laboratory

Bearings

Shearer Aids Divers

If you wake up one day with the unexplainable urge to go underwater pile cutting, a nifty device dreamed up by the fellows at the Civil Engineering Lab, Port Hueneme, Calif., might be just what you need.

An underwater pile cutter capable of shearing a 12-inch timber pile in less than 10 seconds, was developed from a commercial tree shearer.

Removing wood piles has long been a problem for Navy divers. Unwanted or rotted timbers create navigational hazards, and dangerously interfere with development of new piling systems. The piles frequently become breeding grounds for destructive shipworms or borers which thrive on wood as a food source.

The original shearer was designed to be mounted on the front of a bulldozer. The Civil Engineering Lab's version decreased the weight by about 400 pounds. The new shearer includes self-gripping blades, larger hydraulic rams, a reaction guide to prevent jamming, and a diver-operated control valve.

The addition of gripper spikes to the two blades assures a firm hold of the timber before shearing starts.

The cutter weighs 480 pounds on land but only 30 pounds in water with the aid of a lift device (buoy). Two divers can easily maneuver the tool into position around a pile. A simple flip of the control valve sets the cutter into a shearing motion. The jaws of the cutter are a pair of solid steel blades, each 22 inches long and 12 inches wide. Two rams close the blades in a scissoring action, crunching or shearing the pile into two pieces.

Thanks to the fellows at the Civil Engineering Lab, you can score that one for the pile cutters—zero for the piles or "take that you rotting hazard to marine safety!"

Last of the Originals

We don't usually print retirement stories. But, when the last original Seabee gets piped over the side . . . well that's something to talk about. Construction Electrician First Class Johnnie Ward Harrison entered the Navy when people were telling everyone to "Remember Pearl Harbor," and "Loose lips sink ships."

Johnnie joined up March 31, 1942, and went to a three-week boot camp at Camp Allen, Va. From there he went to Naval Construction Battalion Ten—the first Seabee battalion at Port Hueneme, Calif.

He and his wife, Ann, recalled those early days of his Navy career recently during his retirement ceremony—at the same place where he originally entered the Navy 35 years previous.

He also remembered some of his tours during those early years—tours of duty at places like Hawaii where he "spent a lot of time stringing barbed wire. The people there were pretty jittery after what happened at Pearl Harbor."

During World War II he participated in the initial landing on Okinawa, where he remained until the close of the war. The end of World War II also brought a temporary close to Johnnie's career when he was honorably discharged on November 24, 1945.

Ten years later he was back in uniform, this time serving with Naval Mobile Construction Battalion One in Guantanamo Bay, Cuba.

Subsequently, the Seabee who once fought in the South Pacific, found himself back there during the war in Vietnam.

The Seabees were hardly strangers to Vietnam. Johnnie spent three tours of duty there with NMCB 5 building bridges, highways and small Navy bases for the river patrol boats that operated on the waterways of South Vietnam.

On his retirement at Construction Battalion 411, his shipmates presented him with a special display case complete with the 12 medals he earned during his quarter century of Navy service.

The end of one man's Navy career this time also marked the end of another chapter in Navy history . . . the last original Seabee.

Roosy's New Sailplane

A sailplane has been added to the fleet of aircraft at Naval Station Roosevelt Roads, Puerto Rico. The *Schweizer* 233 is a two-seat trainer in Bicentennial colors and is being cared for by the Roosevelt Roads Navy Flying Club.

Glider niner-two-niner made its first radio call to the Roosy tower recently requesting takeoff on the station's inactive runway one-seven. LT Rich Wais, president of the club, was in the forward seat and Capt. Tom Stewart, C.O. of the station, was in the after seat.

Now, takeoff in a glider which has no engine is a bit complicated. But with the assist of a truck tow and a secure hookup to 1,500 feet of line, the glider was airborne in less than 100 feet. She then went to 850 feet before releasing the towline.

Anyone at Roosevelt Roads can learn to fly and solo a glider as long as they are over 14 years of age. But a warning: If you take that first flight, be prepared to be hooked. It's that kind of sport.

Ships from the Past

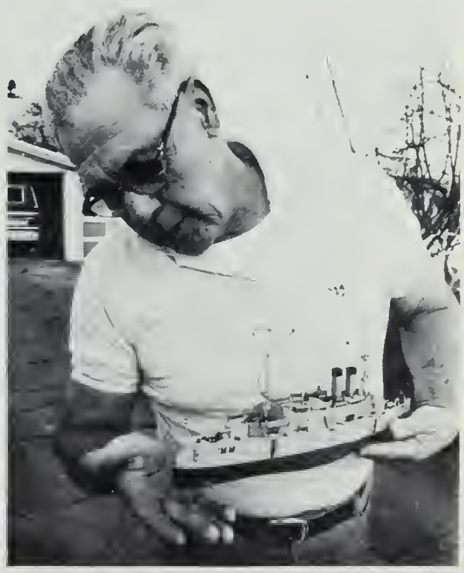
"Hell, I never had any money," retired Chief Machinist's Mate Burl E. Green said, "so I stayed on board and made model ships."

After many years of moving and storing the models the Seattle resident made while at sea, he thought others might be able to benefit from them. He called Navy Recruiting in the area and a public affairs officer dropped by his house to take a look. The officer told Green that Navy Recruiting could indeed, use the finely crafted, meticulously detailed models.

"If I were to move again," he said, "I'm afraid they might get broken. There's too much work in them for that."

Today, the models are on display in a Bellevue, Wash., recruiting station where applicants, recruiters and visitors alike can see the results of one man's love for the sea.

"Like I said, I never had much money in those days and I stayed on board a lot and made models . . . But you should have seen Shanghai."



Bearings

The Day the General Came Aboard

Units of the Sixth Fleet recently had a very important person drop in—literally.

General Alexander M. Haig, Jr., U. S. Army, Commander in Chief United States Forces Europe and Supreme Allied Commander Europe, swung high and low as he was hoisted and lowered by helicopter to various Sixth Fleet ships operating in the central Mediterranean.

"My headquarters is in Brussels and the only way that I can know just what programs are vital to our national interests is to get out and see what the requirements are," the general said in explaining his trip.

Haig flew from Naples to the carrier *John F. Kennedy* and was immediately whisked to the guided missile destroyer *Dewey* by a *Sea King* (SH 3) helo. He was lowered to the *Dewey's* fantail for the first of his visits. The

general made brief stops at her bridge, combat information center and was given a detailed briefing of the ship's missile systems.

Then it was up and away for a visit to another guided missile destroyer. Onboard USS *Farragut,* he toured the ship and had lunch with the crew. The general also stopped by to chat with some of the "old salts" in the chief petty officers mess where he presented them with a Supreme Headquarters Allied Powers Europe plaque.

Still on tap that day were trips to the guided missile cruiser *Stanley* and the fast frigate *Blakely.*

Late that afternoon Haig returned to the *Kennedy* for afternoon flight operations and dinner with the junior officers.

His day was still not over. In the evening, General Haig toured medical and engineering spaces on the big carrier and answered questions from the crew on their closed circuit TV system.

The next day it was the turn of various shore commands to fall under the general's eye. Naval activities at Sigonella and Naples got a close look at the boss (and vice versa) before General Haig's plane left that afternoon for Brussels.

As for the general's impressions of his visit: "Since I was out here a year ago the changes I've seen in technology alone have been tremendous." ⚓

The Future is Now

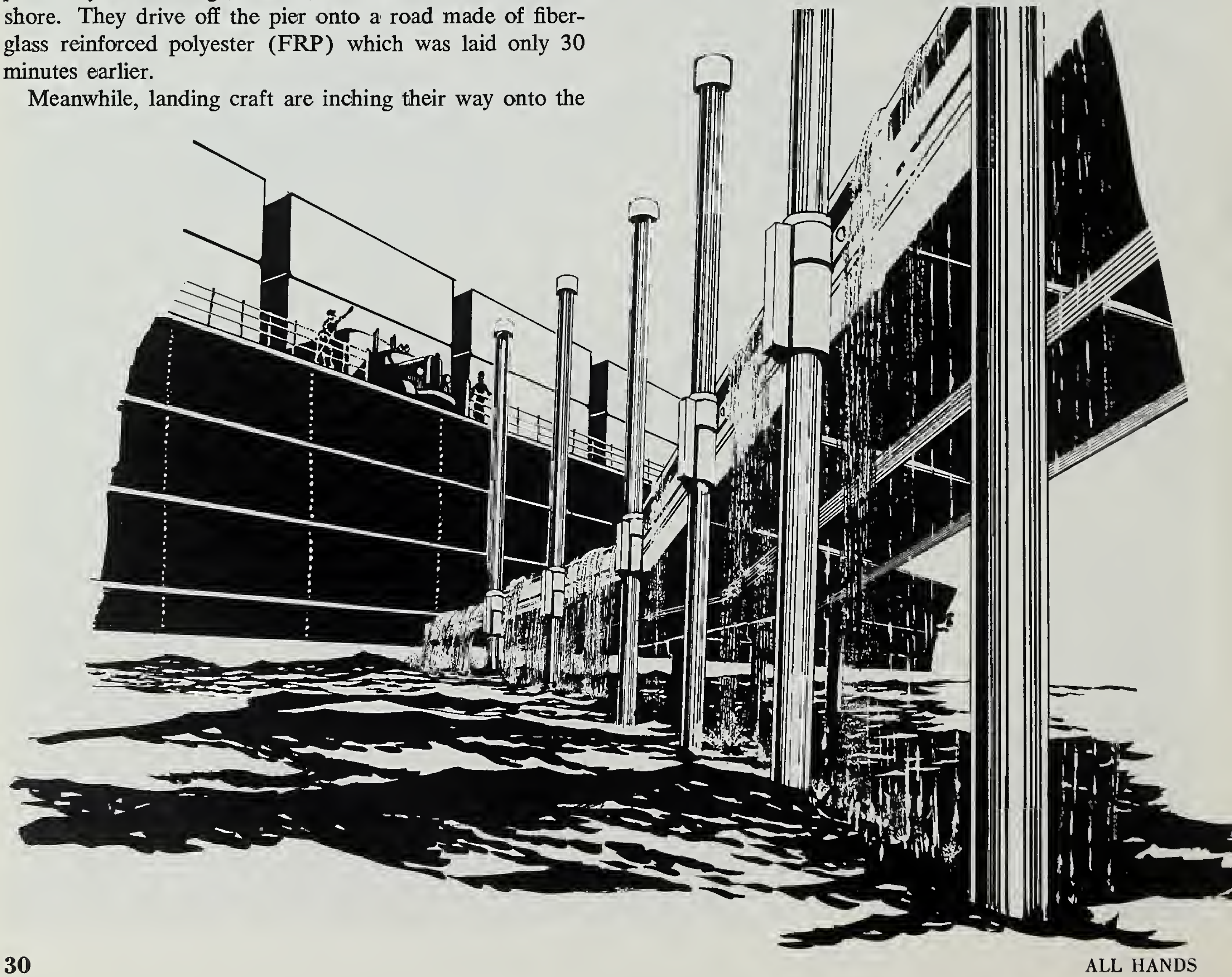
If the crystal ball at the Navy's Civil Engineering Laboratory (CEL) can be trusted, the sea service of the future will owe a lot to science. Hoping to get a glimpse of tomorrow, we asked Navy researchers in Port Hueneme, Calif., about the changes improved technology will bring. What follows is their answer—images of tomorrow's technology in action. The scenes are not drawn from windmills in their minds, but from actual projects now on the drawing boards or in prototype today.

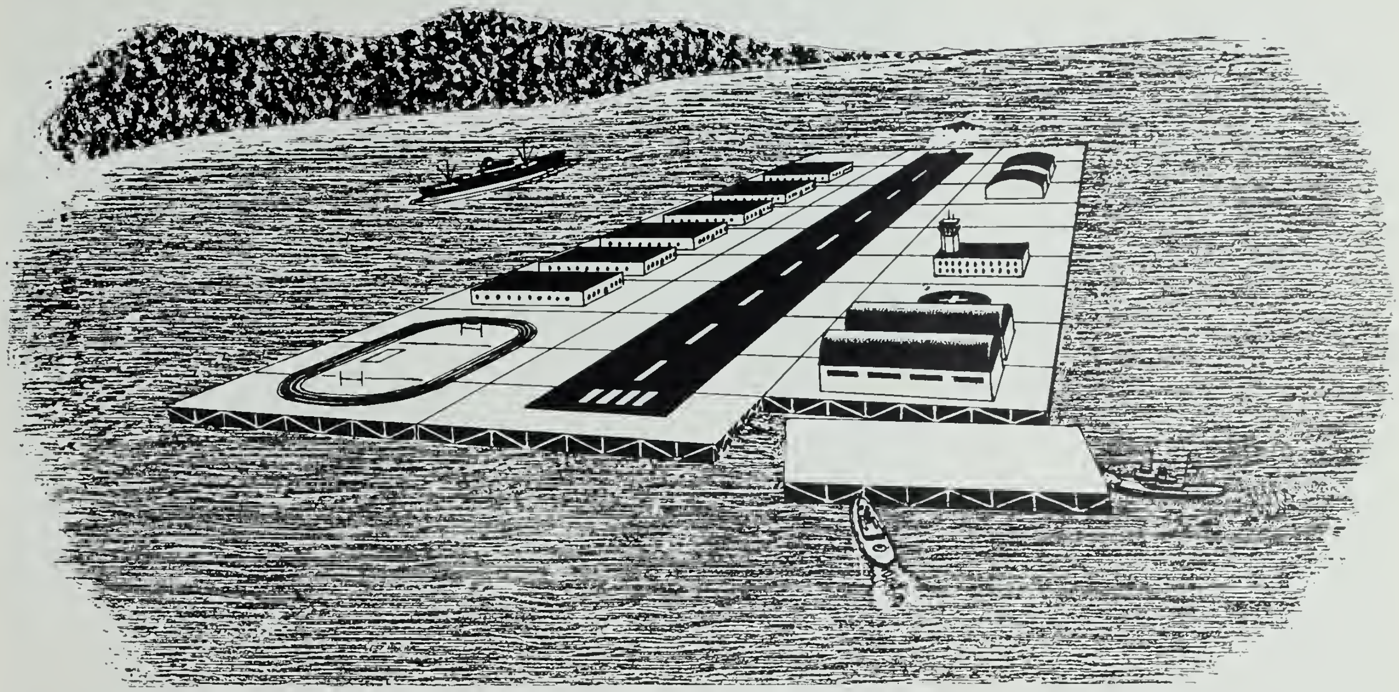
As a fleet of container ships approaches an unimproved beach, Seabees erect a self-elevating pier for off-loading. The pier actually jacks itself up or lowers itself on its own spuds as needed. Trucks rumble onto the pier ready to be loaded. They are swung around on a giant turntable supported by air bearings; loaded; and then shuttled back to shore. They drive off the pier onto a road made of fiberglass reinforced polyester (FRP) which was laid only 30 minutes earlier.

Meanwhile, landing craft are inching their way onto the beach by using thrusters which propel them high and dry for off-loading. Personnel disembark without getting salt water into their dry boots or the delicate gear they carry. As fast as they are off-loaded, the landing craft reverse their thrusters and power their way off the sand and back into the surf.

At a jungle clearing a few miles inland, Marine helicopters land a portable pump and fuel cells filled with aviation fuel. No sooner does the gear touch ground than VSTOL aircraft begin approaching for instant refueling.

Further inland, heavier layers of FRP are being laid for an airfield on which conventional fighter aircraft will land later the same day. The surface is leveled by Seabees operating grading equipment controlled by a laser beam which





permits accuracy to within one-quarter inch with ease.

In an area just behind the front lines, special mobile shelters have been set up for use by Marines back from the front lines for a little on-scene R&R. They line up to toss their dirty clothes into a sonic washing machine which includes an infra-red dryer. While their clothes are being washed and dried, the Marines shower in minimum water showers. Just under 10 minutes later, both Marines and fatigues are clean and dry.

A few miles offshore, tugs are pushing 300- by 300-foot concrete floating modules together to form a 900- by 3,000-foot seaborne base. When finished, the structure will support a warehouse, helicopter pad, conventional airport, hovercraft base, and unloading and maintenance space for tankers, freighters, carriers and amphibious ships.

When the emergency is over, the entire structure will be dismantled and towed away for future use.

Nearer shore, Seabees are firing propellant actuated anchors straight down into the seafloor to provide a mooring for incoming tankers. Nearby, underwater concrete structures will store millions of gallons of fuel, ready to be pumped ashore as needed or floated to the surface for ships. Down below, other Seabees are cutting a trench in the seafloor using a bottom-crawling trencher.

At another remote Navy installation, windmills poke into the sky, providing a significant portion of the base's electrical power. Banks of solar collecting panels at Navy housing units are providing space and water heating.

Back at a Navy base in the states, trash at the curb is being picked up by a remotely-controlled hand on a one-man refuse truck which never has to stop rolling during the entire operation.

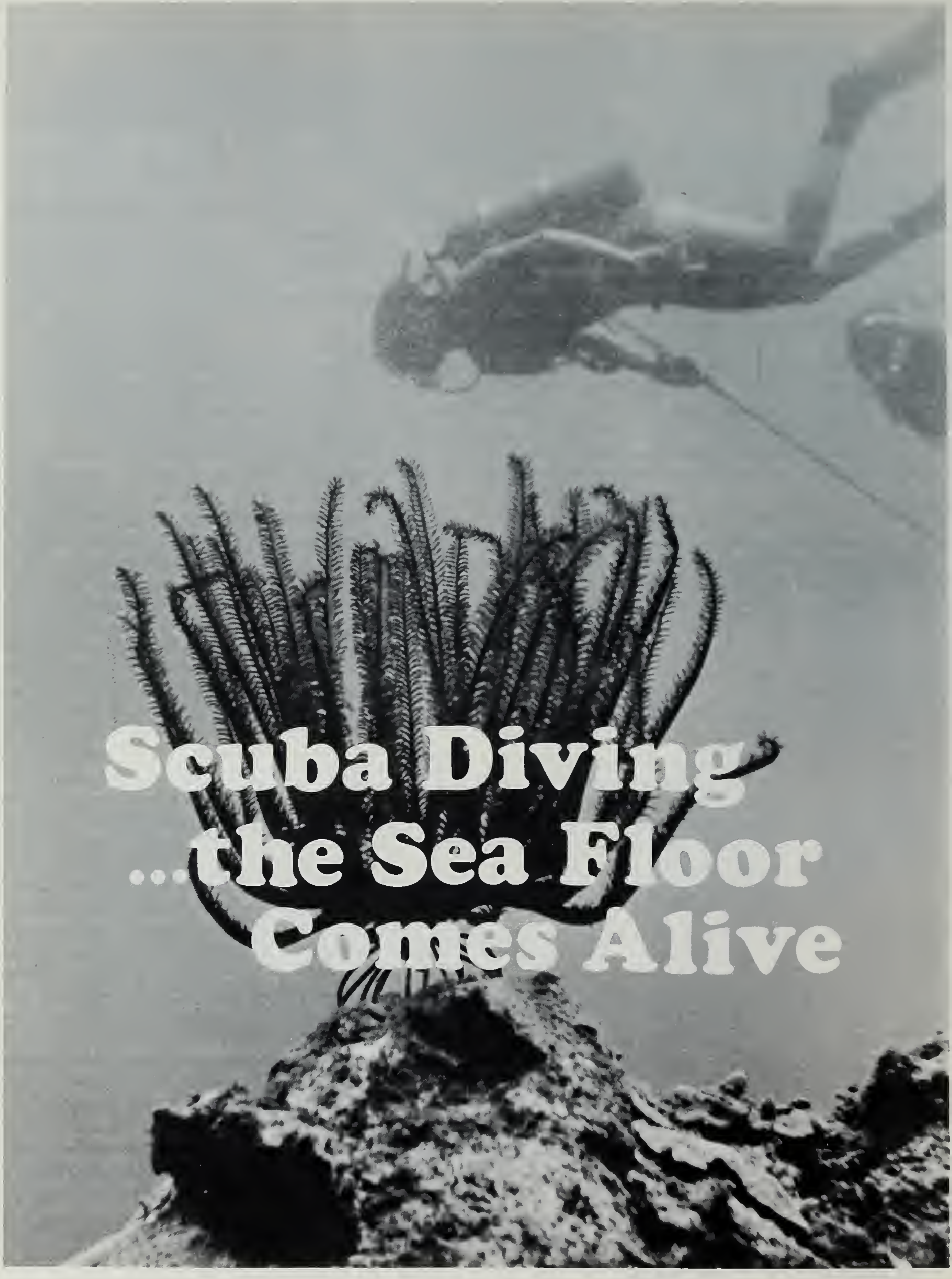
At a nearby naval hospital, a surgeon on his way into an operating area presses his hip against a wall to activate the door with a transponder card in his wallet—his hands remain sterile. Power for his hospital electrical equipment is being continuously monitored by a high quality power monitor equipped with a print-out device which indicates power anomalies.

At a naval air station, hangar decks are coated with a white, reflective paint, thereby eliminating the need for most auxiliary lighting under the wings of aircraft. Overhead, the old hangar roof has been coated with urethane foam to prevent leaks and increase insulative qualities.

Just offshore an oil slick is quickly brought under control by a ship distributing foam chips, squeezing them dry and redistributing them in a single pass. The sea behind the ship still has a trace of oil, but a hovering helicopter drops freeze-dried bacteria on the remaining slick—in a few days the residue will have been completly devoured by the harmless bacteria.

All of these research projects are now, or have been within the past three years, in some state of research study or evaluation at CEL. More than 9,000 Navy patents are now available for licensing and use by the public, many of them with important civilian applications. Prolific Navy inventors are now working on scores of new and old problems presented by the operating forces of the Navy and their support elements.

The Navy of the future is likely to be just as busy, reaching out toward its own future with the technology of that day. With each passing day, more of the future is now. ⚓



Scuba Diving ...the Sea Floor Comes Alive

BY JO1 JOHN YONEMURA

SPLASH!

The sudden cold shock is immediately forgotten as you peer into the pitch blackness which engulfs you. Visions of *JAWS* send chills down your spine as you float on the surface, arms and legs dangling beneath you.

Your diving partner signals. Switching from snorkel to regulator, you take a couple of quick breaths to make sure —one last time—that it's working.

Then you descend. Following the anchor line, you go down slowly, pinching your nose and blowing out against the closed nostrils to equalize pressure in your sinuses and ears.

With a flick of the switch, a bright beam of light pierces the depths. All you can see is what passes through that narrow beam. The rest you just feel . . . or imagine that you feel.

You reach bottom, 45 feet below the ocean's surface. It's a dream world of colors and creatures. The sea floor comes alive at night.

The same bleak coral you saw yesterday has erupted in pink, red and purple blossoms. Tiny insect-like crea-

Above: A club member films an underwater sequence for a local television program. Photo by OS2 B. Masters.

The warm water of Subic Bay boasts beautiful undersea life and coral formations. Photo by PH3 M. Cummings.

Above: A club diver explores the hulk of a sunken submarine. Photo by SM1 R. Million. Right: A Gitmo snorkeler enjoys spear fishing. Photo by PH3 W. Curtsinger.

tures that hide all day scurry helter-skelter amid the rocks in search of food. Moray eels that yesterday glared at you from nooks and crannies in the rocky bottom now swim with you, their long bodies— some up to seven feet— rippling through the water.

Multi-colored fishes weave in, out and over the rocks and coral blossoms, darting here and there to avoid *being* food.

All of this beauty and excitement, just the thought of being able to breathe underwater, attracts Navy men and women to SCUBA (the acronym for Self-Contained Underwater Breathing Apparatus) diving every year. Whether collecting shells, investigating sunken wrecks, or just observing the fascinating undersea world, recreational SCUBA diving clubs are found at naval commands around the world.

The Naval Air Station Jacksonville Skin and SCUBA Diving Club, Inc.,

for example, is a non-profit organization promoting all water sports. Club members assist the local community (military and civilian) by conducting life saving classes, small craft handling courses, cardiopulmonary resuscitation instruction, water recovery and rescue demonstrations, and swim-in, fund raising activities in addition to skin and SCUBA diving instruction.

The club takes three or four major diving trips per year, visiting such places as John Pennekamp Coral Reef State Park on Key Largo, America's first undersea park, or the Virgin Islands. Monthly local dives include fresh water and cave dwelling as well as ocean dives.

"You can't overstress safety," says Senior Chief Illustrator Draftsman Marshall Gross, a founder of the club

Below: Aku Marine Dive Club members return from a dive. Photo by SM1 R. Million.

and its chief instructor. He explains that a diver must "know" his equipment and be certain of his capability to cope with unforeseen incidents without panic. "Our motto is 'safety through education'," he adds.

All divers must meet strict requirements and go through intensive instruction before earning an approved diving certification card, their passport to lower space.

Another Navy club, the Subic Bay Sports Divers Club, tailors its program for the fleet sailor, but does not compromise safety. "In the four years of the club's existence, there have been no diving accidents," Club President Ray Griep says.

Subic Bay is one of the few naval bases with a dive shop operated by Special Services. Guantanamo Bay is another. However, many Navy dive clubs utilize special services swimming pools for instruction.

And Navy dive clubs are not limited to shore installations. Aircraft carriers *Saratoga* and *Roosevelt* and the replenishment oiler *Milwaukee* are among the afloat commands with clubs aboard.

Planning a diving trip on a deployed ship involved unique problems. According to Navy Counselor 1st Class Jerry Wilkins, club president aboard *Milwaukee,* the first step is approval by the executive and commanding officer. Then, if a boat is required, the First Lieutenant must be notified. The quartermaster then provides charts indicating depth, hazards and peculiarities of the diving area. After all this, an official request must be submitted to the host country's port authority.

Milwaukee's club has made dives off the coasts of France, Italy, Sicily and Spain.

Adhering to safety rules is a never-ending process. Experienced divers are as prone to accidents as new divers. "Where the inexperienced diver tends to be extremely cautious, the seasoned diver sometimes lets complacency lead to carelessness," says DMCS Gross. He's assigned to the Human Resources Management Detachment at Naval Station, Mayport; he has been diving since he was 12. "Believe me, it isn't a thrill to have a close call," he says.

PR1 Mel Deweese, a club vice president, discusses a dive. Photo by PH2 J. Kristoffersen.

Gross places the blame for most accidents on the divers themselves. Name brand equipment is dependable when proper care is taken. "Very few accidents are caused by equipment failure," he states.

A special companionship develops between divers. You must depend on your diving partner for emergency assistance. At times, your life is in your partner's hands—and vice versa. If you have trouble with your regulator or run out of air, he or she is there to "buddy breathe" with you up to the surface.

The camaraderie is international. SCUBA divers can find friends all over the world. For one thing, members of your club who have transferred, give you an "in" in their areas. Even if you don't know anyone personally, divers take care of their own.

Persevering in the demanding classroom—pool—open water instruction, you receive certification, which affords the opportunity to become part of the underwater world. Whether during the day or night, you experience firsthand the spellbinding environment which you once viewed when first you looked through the aquarium glass.

You rise slowly, no faster than your smallest bubbles. When you break the surface, you switch to the snorkel and head back to the boat. The superlatives racing through your mind don't do justice to all you have just seen. You throw your flippers into the boat and climb aboard. It isn't until you sit down that you realize how tired you are. ⚓

Shake

These scenes, taken with an 8mm movie camera, depict the way NOT to land an airplane, unless you are testing it for durability under stress.

Rattle Roll

BY JO1 JERRY ATCHISON

There is a game children play that—while it may take different forms—is basically the same the world over. Back in the days of home delivery of milk, it involved a child taking the glass milk bottle, holding it over his head, then dropping it. The object of the game was to see how high above ground the bottle could be released before it shattered.

Lieutenants Thomas Gregory and Jim Kiffer might be described as today's advocates of this game. The only difference is that they are not children and they do not consider it a game. Gregory and Kiffer, you see, try to break Navy airplanes. The two are members of the Carrier Systems Branch of the Strike Aircraft Test Directorate at Naval Air Test Center, Patuxent River, Md.

Their premise is simple: if new airplanes and avionic equipment scheduled to join the Navy can survive the paces these two and others put them through, then those new planes and equipment can stand just about anything the fleet can put out.

The tests are called "shakes, rattles and rolls" and here's how they work:

Over at the steam catapult area, Gregory's catapult crew is busy hooking up a plane for a launch. It looks much like the normal operations one would witness on the flight deck of any aircraft carrier. Indeed, the steam catapult is exactly like the kind found aboard *Forrestal*-class aircraft carriers. There's some difference in that this catapult is located on land and the catapult crew—scurrying around the plane in preparation for launch—are purposely spotting the plane on the catapult so that it will be launched off-center.

When everything is hooked up correctly (or incorrectly, as dictated by test requirements), the launch signal is given and the plane goes skewing down the runway enveloped in a cloud of steam. Somehow the test pilot manages to get the plane airborne.

During a morning of catapult launches, the plane is launched off-center left and right, at maximum allowable catapult pressure and launched normally—just for novelty.

Over at the arresting gear site, LT Kiffer is working as the Landing Signal Officer (LSO), who talks planes down to a normal landing. The "normal" landing in progress has Kiffer directing

(→)

the approach aircraft into a rate of descent almost twice that considered acceptable. Instead of descending at 12 feet per second, the approaching aircraft (at Kiffer's direction) is dropping out of the sky at 20 feet per second. Predictably, the plane bangs down on the runway as its tailhook tries wrenching the arresting gear from its housing. It's enough to make a seasoned carrier pilot cry.

After a going over by technicians, the plane is reved up and taxied down the runway for take-off. This time the plane will circle around and come in for a 20-foot off-center arrested landing. When the plane's tailhook catches the wire the craft skews on the runway because of the unequal tension.

Technicians come out again, go over the plane still one more time and give it the OK to take off once again. Before testing is completed, the plane will have caught the wire with all its wheels off the ground (called free flight and much like having a large hand push the plane straight down on the runway) and landed while performing a roll and yaw.

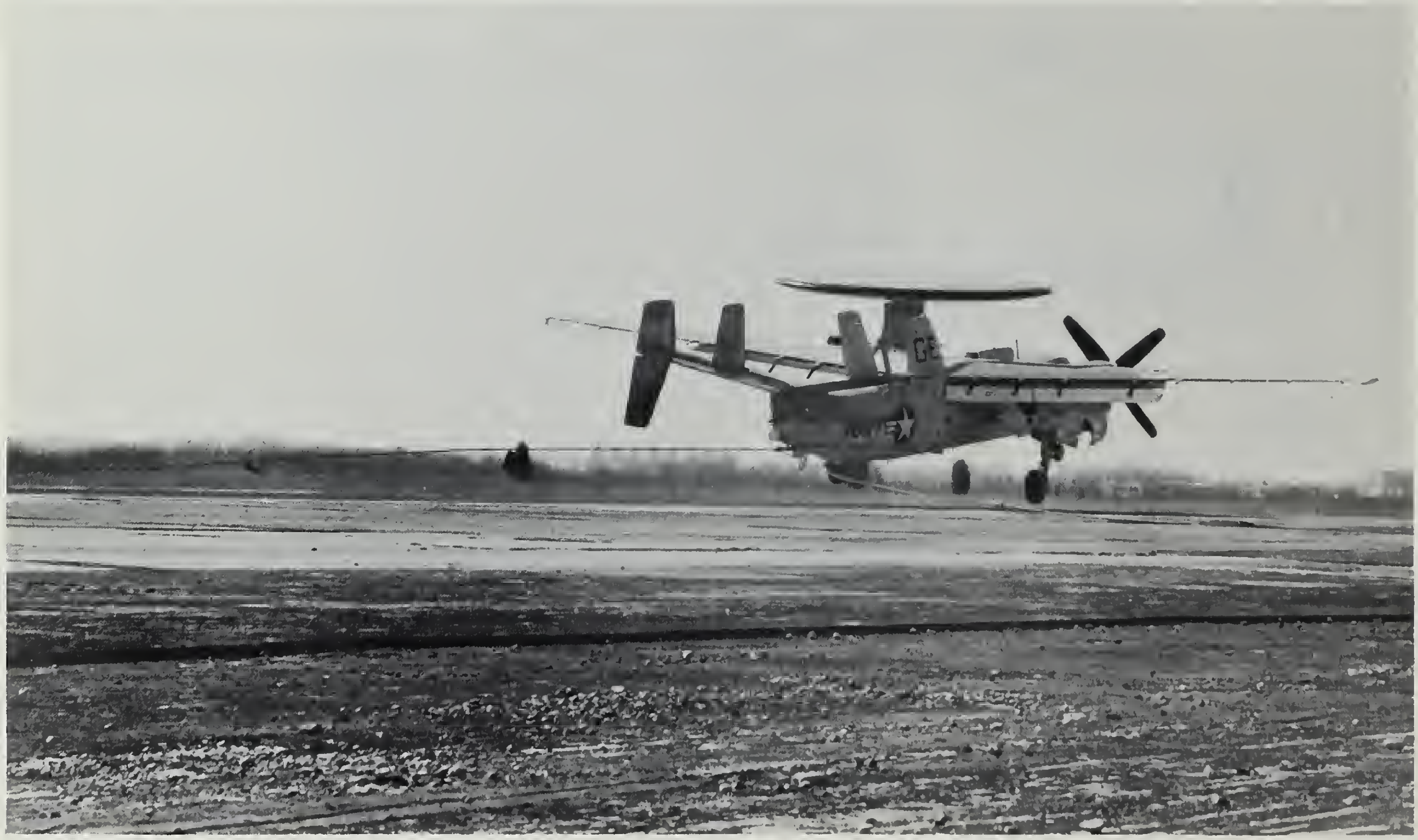
From a demolition derby point of view, the roll and yaw landing shows the greatest potential for excitement. In aviation, to roll a plane is to rotate about the plane's longitudinal axis; the yaw of an aircraft is when the plane turns on its vertical axis. Do them at the same time in an airplane while making an arresting gear landing and the results are smoking, screeching tires, banging metal and a jarred test pilot and crew. Once is not enough, however. After making one landing where the plane is rolling and yawing in the same direction, they make another landing where the plane rolls and yaws in opposite directions.

To the casual observer, it might appear the Navy has taken a "Bull-in-a-China-Shop" approach to testing aircraft and equipment.

Nothing could be farther from the truth. Before the plane is tested, a number of events occur that are designed to guarantee the safety of the plane crew and the people on the ground at the catapult and arresting gear sites.

Chuck Rausch is one of a number of civilian project engineers working for the Strike Aircraft Test Directorate. Before a new piece of equipment is installed in a plane or before a new plane is brought out for testing, men like Chuck and his crew of

During a "free-flight" arrested landing, the plane's tail hook catches the wire before the wheels touch the ground.



The catapault crew checks the gear immediately following an off-center launch.

engineers, scientists and technicians have conducted extensive laboratory tests. In addition, the Navy experts huddle with the civilian manufacturer reps with the result that everything that can be uncovered about the plane or equipment is known—before the plane gets airborne.

Because of this extensive pre-investigation, the "shake, rattle and rolls" they put planes through often serve not as vehicles into the unknown but as methods by which theories are confirmed.

Before the plane and equipment are turned over to men like Gregory and Kiffer, the project engineer meets with them for additional briefings.

Finally, when the plane leaves the ground, everyone involved in the tests knows exactly what its limits are and what the final results should show. Results of these tests are compiled by scientific equipment, and test pilot skill, coupled with plain old eye-balling as the aircraft goes through the paces.

Onboard the test plane, evaluation equipment constantly monitors, records and transmits data to an antenna-covered truck stationed by the runway. This data will be sifted by scientists for clues into the characteristics of that being tested. Technicians also fly in the plane during the test to monitor the sensing gear and make their own evaluations from their airborne perspective.

On the ground, motion picture and still cameras record the plane's take offs and landings. Scientists follow the tests from vantage points next to the runway and up in the tower. And over it all are men like Gregory and Kiffer—veterans of hundreds of launches and recoveries.

It is to these veterans that the responsibility for a "go" or "no-go" decision comes. During high speed launches and landings there is not time to sift data, discuss alternatives or consider variables. The instinctive reaction born of years of experience is the final safeguard for these tests.

Navy aircraft, particularly carrier aircraft, sometime experience stresses and strains unmatched in aviation. It is a consoling thought in the midst of such a situation that the planes and equipment have been put through them before—and safely—at NATC, Patuxent River. ⚓

Rights & Benefits

"Base Housing Is the Choice of Many"

Military housing has always been a primary concern of Navy people regardless of duty assignment. Invariably, whenever the conversation turns to housing, or lack of housing, the same questions are asked:

"What's the Navy doing to provide suitable housing for its members?"

"How come my BAQ doesn't cover the cost of adequate housing in the civilian community surrounding the base?"

"Why can't everyone live in government quarters?"

"Why are there waiting lists for housing on Navy bases?"

The Navy, which has always placed great emphasis on the welfare of its people, does not turn a deaf ear to these and similar questions about housing; it is doing everything possible to answer queries from the fleet and improve housing conditions as budgetary constraints permit. In fact, the principal objective of the Department of Defense military housing program is to assure that married members of the Armed Forces have suitable quarters.

Basic policy is to rely on the local civilian housing market in communities near military installations as the primary source of family housing. New construction is programmed for eligible military personnel only when community support is limited or inadequate due to cost, distance or quality.

The Department of Defense defines eligibility, as it concerns housing, in terms of paygrade and length of service. Petty officers third class (and above) with more than two years' service qualify as eligible military personnel. While current legislation doesn't permit construction of family housing units for nonrated members, the Navy does maintain some rental units (classified as substandard) which can be used by enlisted members in paygrades E-1 through E-4 with two years of service or less and their families. The rental cost for these substandard units is sufficient to cover expenses of operation and maintenance but never exceeds the member's BAQ.

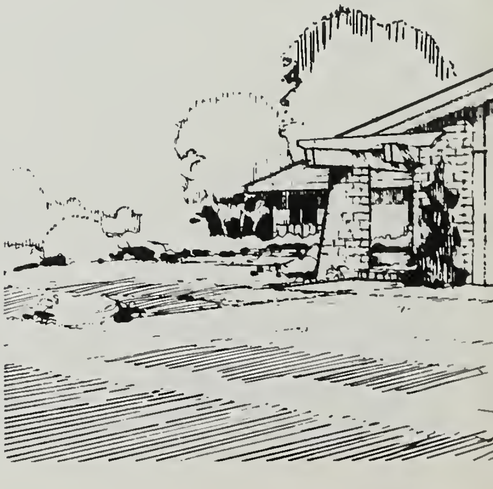
At the beginning of each year, certain military installations conduct a survey to determine whether or not a local community's housing market can meet the Navy's needs. All existing military housing units, units under construction, and approved construction programs are listed. The rental assets in the area are then evaluated for suitability.

Several criteria are used to evaluate the rental units before they are determined suitable and usable by military members. First, a unit must be within one hour's driving time of the base during rush hour periods. Second, the unit must be in good condition—it has to be a complete dwelling unit with a private entrance, private bath and private kitchen. Third, and possibly most important, it must be affordable.

If a unit passes all three tests, it is added to the total of military housing units—all such units add up to the grand total of units available for use by military families in any particular area. This grand total is then compared with the number of military families in the area to ascertain if the total units available are sufficient to house at least 90 per cent of the eligible military families expected to be in the area within the planning cycle (generally five years). If there are not enough, there is justification to request additional construction to be programmed by DoD. If DoD determines that the survey results are accurate and the Navy's conclusions valid, then the Navy housing request will be incorporated into the overall Family Housing Construction program and presented to Congress.

"Affordable," as it applies to civilian housing, is another term which requires explanation, especially when lower ranking members start planning their budgets. Affordability is determined not by a member's BAQ, but by his or her MAHC (Maximum Allowance Housing Cost). The service member's MAHC is derived from a complicated formula that takes into account, basic pay, allowances for subsistence and quarters, tax advantage and data on housing costs paid by civilians in comparable wage scales.

For example, a second class petty officer, with eight years' service, basic pay of $618.90, BAQ of $168.30,



BAS of $89.70 and a tax advantage of $50, ends up with an MAHC of $269 (compared with a BAQ of $168.30). He or she would not be considered as overspending for civilian housing unless he or she is paying more than $269.

Using rounded out figures, the Navy has about 73,000 sets of quarters located all over the world; there are about 220,000 eligible families. Looking at the worldwide picture, the Navy can provide government quarters for about 30 per cent of the eligible families. When considering only the continental U. S., the figure drops to 20 per cent. Requirements for housing within the U. S. are reduced because many families own their own homes or prefer living in civilian rentals.

As popular as living in the civilian community is, base housing still is the choice of many as evidenced by long waiting lists. There are several reasons for this: perceived savings (residential heating gas costs increased about 20 per cent, and fuel oil increased about 8-10 per cent); convenience of commissaries, exchanges and maintenance facilities; and commonality with neighbors, since all are in the military.

In addition to providing base housing and housing allowances, the Navy also helps members find a place to live which fulfills their needs. When members receive permanent change of station orders, an item is included which directs them to report to the Housing Referral Office (HRO) at the new duty station. HRO helps newcomers by providing a listing of apartments and houses tailored to meet any need. The listings are by area, price and size and the referral service is free.

The Navy guarantees that those who list will not discriminate on the basis of race, religion, national origin or sex. Based on past results, the HRO is a great asset as evidenced by the fact that some 92,000 members were processed through the organization during the period covering July 1975-June 1976. Of that number, some 82,000 requested specific assistance and HROs were able to obtain housing for seven out of every 10 applicants.

Possibly due in part to the success of the HROs, it is not expected that there will be a great increase in family housing construction. In fact, the proposed construction program actually points out that there was a decrease from 2,850 units built in fiscal year 1975 to 928 units authorized last year.

Recommendations of a housing study by the Office of the Secretary of Defense and the Office of Management and Budget, conducted recently, proposed the concept of fair market rental. This would put all housing units on a comparable civilian rental basis requiring the services to structure the rental cost for quarters so that the cost would be competitive with the civilian marketplace. To accomplish this, all quarters would have to be appraised, utilities costs determined and rental rates adjusted to comparable housing rents in the local community.

Under such a system housing, ultimately, would be completely divorced from military compensation and each military member would pay the fair cost of the housing occupied whether on base or in the community.

President Ford approved this concept in principle, but the ramifications of the idea are still being studied. No implementing legislation has been presented to Congress as yet.

Conversion of the current system of forfeiture of BAQ for occupancy of public quarters to a system of fair market rental would take a number of years. The DoD goal, if the concept is approved, would be to implement the change gradually and attain fair market rental by 1984. ⚓

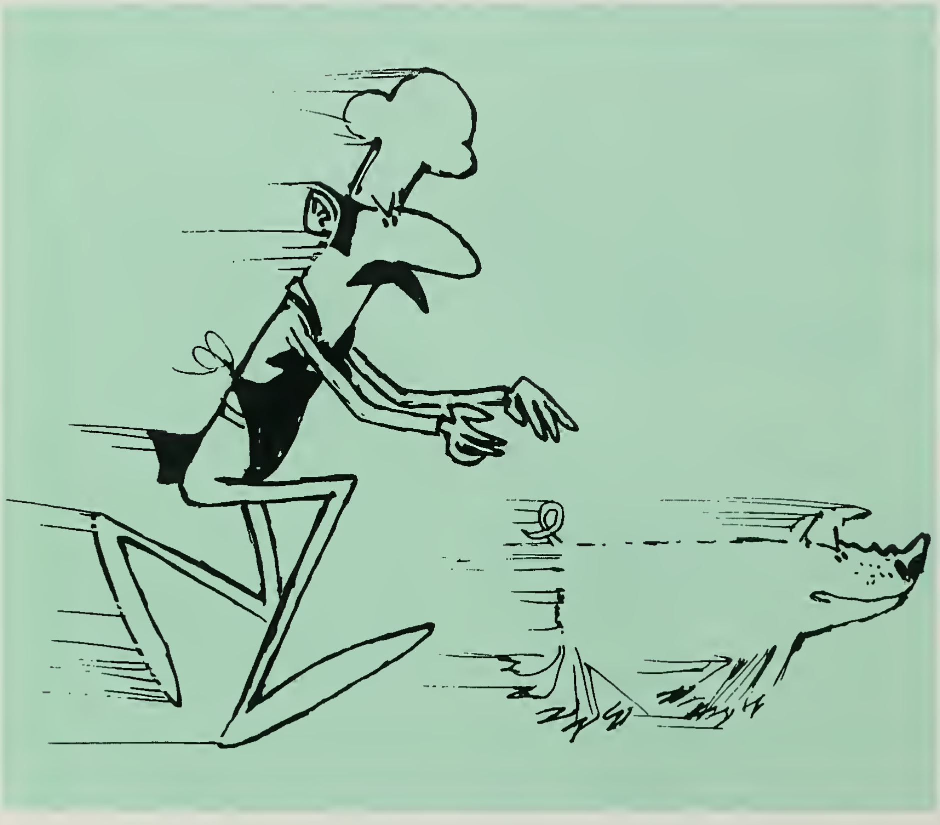
...My Compliments

BY JO1 JERRY ATCHISON

The gourmet in search of a banquet was well advised to steer clear of the U.S. Navy in 1902. Not that food wasn't plentiful and palatable; after all the Navy alloted 30 cents per man a day for food. It's just that progress in food preparation aboard ship still had a way to go.

The Navy recognized this in 1900. Cooking in those days, done either by guess or by fistful-of-flour type measurements, was the result of the cook's whimsy—and occasionally the crew's displeasure. Some standardization was needed to avert indigestion as a sailor's occupational hazard.

In 1902, the Navy took the bull by the horns and, instead of telling cooks to put it in the pot, came up with the Navy's first cookbook. Here, too, is the first record of that spoonful of valhalla, that nector of the mess decks and that stuff from which legends have been made—
Navy bean soup!



BEAN SOUP WITH SALT PORK

"Soak 5 gallons of beans in fresh water and 80 pounds of salt pork in fresh water or salt water over night.

to the Cook

Put the beans in a copper and let them boil, then add 15 pounds of the pork. Continue boiling then remove. In a separate copper boil the rest of the pork until tender. When bean soup is done, season with pepper. Cut up 6 pounds of stale bread, brown it on a pan in the oven and add to the soup, stirring it in. (Note.—One gallon of the stock from the copper in which pork is boiled may be added to the soup.)"

Be advised that this recipe and the others mentioned here are for 100 people. Unless you are possessed of either a very large appetite or 80 pounds of salt pork that you want to get rid of, don't try it out in your kitchen.

As can be seen from the bean soup recipe, there were still a lot of variables left up to the cook. How much salt? How long should it boil? What, exactly, does the browned stale bread do for the soup?

But it was still a start in the right direction and any change at this time had to be an improvement. Recipes were kept simple and with little variety. For example, those who really liked their potatoes with their meals could choose from only two varieties: boiled or mashed (and you can't have the second without the first—or did the cookbook writers of the period realize this?)

That first cookbook, inspired mainly out of despair, was suggested by the Bureau of Navigation (the old Bureau of Naval Personnel) and authored by Paymaster H. T. Arms, who had a broad knowledge of feeding enlisted men. Paymaster Arms dictated the 69 recipes included in this 1902 edition at night to his secretary as they were supplied by his chief cook. The Chief Cook at Cob Deck Galley, Navy Yard, Brooklyn, New York, did the testing. The 1902 recipes were incorporated with two sections on mess management, then a function of

...My Compliments to the Cook

the Bureau of Supplies and Accounts, but evolved into a full-fledged volume of recipes in 1908.

Running the mess properly must have been a real problem in the 1902 Navy. From the cookbook:

"The general messing system is, by the regulations, obligatory on board all vessels of the Navy. The mess must include all enlisted men of the Navy and Marine Corps, excepting chief petty officers and officers' servants, and its members are to be divided into messes of about twenty men each, and as nearly as possible messed by divisions instead of by ratings, as has heretofore been the custom. By this method the petty officers will be scattered among the messes and there can be no complaint on account of discrimination—all faring alike."

Which leads one to conclude that the petty officers of the day had previously either been eating much better or much worse than the rest of the troops until the changes were made.

If the food lacked variety, the names for dishes served certainly didn't. One dish—from its title—might include portions of roast beef, a few gallons of ice cream and a liberal sprinkling of chopped nuts. Here, then, is:

YE OLD NAVY COOK BOOK

BEEF A LA MODE

"Place 60 pounds of beef in pans on the galley. Add 20 pounds of canned tomatoes and season with salt, pepper, and vinegar. Cut 5 pounds of onions in thin slices and fry with gravy of beef in frying pan, adding flour to thicken. Pour over meat adding water if too thick and allow the whole to simmer for about 15 minutes. Serve very hot with boiled potatoes. (Note.—This meal can be prepared in about 40 minutes.)"

It is perhaps appropriate to make note of the fact that sailors' diets of the period closely approximated the meals served their civilian compatriots. If nothing else, the beginning of the 20th century in the United States might be called the "Age of Meat and Potatoes."

But let us jump now to 1927 and the "Age of the Gourmet" aboard ship. What marvels of culinary delight present themselves in the 1927 edition of the Navy cookbook.

The 1902 book gave us two recipes for potatoes. By 1927 there were 23 potato recipes. But it didn't stop there. The 1927 edition of the Navy cookbook had grown to 251 recipes overall (up from 69 in 1902) and had definitely begun instilling a bit of variety into the menu.

Basic meat and potatoes were out. A mealtime melange was offered the 1927 sailor that could include caviar canapes, boiled tongue and beef hearts. The cook of the period now had 23 desserts to choose from, 74 various ways of preparing vegetables and 23 separate recipes for sauces and gravies. Also, we learn how the sailor of the day liked his coffee—

or at least how he *got* his coffee aboard ship:

COFFEE

"Place coffee pot on fire with 2½ gallons clear water. Bring to a boil. Add ¾ pound of coffee and let cook at a simmering temperature for 7 minutes. Settle with a dash of cold water or strain. Add one pound of sugar and one can of evaporated milk."

Of course the sailor ate better in 1927 because the cost of daily rations had jumped to 56 cents per day a man. Please pass the caviar. . . .

The 1927 edition (as well as the 1908 edition) was prepared by the Director of Navigation at the School for Cooks and Bakers, U.S. Naval Training Station, Newport, R.I., and was used for training. In 1932 and 1940, Supply Corps Officers added to the recipes of 1927 and used the books as guides for directing the general mess.

From there, food in the Navy began to assume the importance it rightly deserved. The 1940 cookbook jumped to 155 pages of recipes followed closely by the 1945 edition that gave the sailor 450 pages of recipes with variations and variations of the variations.

This was also the time when "what tasted good" was not the only criterion for formulating recipes and menus. America was growing conscious of such things as nutrition, calories and the like. Navy cooks started paying attention to the same things.

All of this, of course, is a far cry from the 1,455 recipes that go into today's Armed Forces Recipe Service. Today's sailors can choose not only from the good old meat and potatoes list but can opt for low-calorie meals, ethnic meals or a number of other culinary avenues that are open to the adventurer in food.

But wait a minute. We didn't mention one of the seven sandwich varieties available in 1927. This recipe is even one that you can try at home—making it just like the 1927 Navy cook did. It's called the lettuce sandwich. What you do is take one piece of lettuce and two pieces of bread. . . . ⚓

Mail Buoy

Reunions

- USS *Seahorse* (SS 304)—Reunion August 2-7, 1977 in Seattle, Wash. Contact Sheldon Stubbs, 2655 N.W Mehama Ct., Portland, Ore. 97229.

- *WAVES* — Thirty-fifth anniversary convention July 27-31 in San Francisco, Calif. for all active duty, reserves, retirees and former waves. Contact Waves 35th National Anniversary Convention, Building Two, Treasure Island, San Francisco, Calif. 94130.

- USS *Ptarmigan* (AM 376), USS *Murrelet* (AM 372), USS *Toucan* (AM 387) & USS *Symbol* (AM 123)—Reunion July 15-17 in Anaheim, Calif. Contact P. E. Nelson, 5022 Howard Ave. Los Alamitos, Calif. 90720.

- USS *Anzio* (CVE 57)—Reunion at Heber, Utah, on September 13-15. Contact Paul W. Swander, 1741 N. 10th St., Terre Haute, Ind. 47804.

- USS *Quincy* (CA 39 & CA 71) —Reunion September 17-19 at Virginia Beach, Va. Contact Albert Levesque, 46 Foster St., Pawtucket, R. I. 02861.

- USS *Wasp* (CV 7)—Reunion for crew and squadrons aboard from 1939 to 1942 sinking. July 15-17 in Toledo, Ohio. Contact Larry Chute, 1330 Nile Dr., Corpus Christi, Tex. 78412.

- *Navy Mail Service Veterans*—Reunion planned August 17-20 in Michigan. Contact Guy Tribble, 428 N. Chicago Ave., Brazil, Ind. 47834.

- USS *Chandeleur* (AV 10)—Reunion planned for August 5-7 in Jacksonville, Ark., for WWII crewmembers. Contact Mrs. Kenneth E. Boyd, Rt. 4, Box 145, Culpeper, Va. 22701.

- *Desron 48*—All crewmembers who served in WWII, Korean conflict or Vietnam war on the following destroyers are invited to attend a reunion August 3-7 at Hudson, Wis. Contact Harrold F. Monning, USS *Kidd* Assoc., Inc., Desron 48, 310 E. 8th St., Kewanee, Ill. 61443.

The Log Book

Here are some more excerpts from ALL HANDS articles of days gone by.

35 YEARS AGO

"SEABEES" is the new name chosen to designate the new Naval Construction Regiments, the Navy Department announced recently. With the name, an insignia has been adopted—a flying bee, fighting mad. On its head it sports a sailor hat. In its forehand or leg it clutches a spitting "Tommy Gun," in its amidship hand, a wrench, and in its aft hand, a carpenter's hammer.

Feeling that a distinctive insignia and an informal name would boost the esprit de corps of the new unit, officers of the Naval Air Station at Quonset Point, Rhode Island solicited suggestions from the enlisted men of the first battalion on duty there, but none seemed to be adequate, so the name was devised by those conducting the contest.

25 YEARS AGO

Sir: There is a rumor going around my station about enlisted men's blue trousers to the effect that the zipper-front style becomes regulation 1 July 1952 and the buttoned-front style becomes non-regulation. Is there any truth to this?

- Button front trousers will be permitted as long as they are serviceable. Various sizes of zipper-front trousers have been on issue for some time. Both types are regulation trousers, and will continue indefinitely.

In Fleet tests, enlisted men showed a preference for the dress blue jumper with shirt-type shoulders and buttoned cuffs in place of that with coat-style shoulders and sleeves. On 12 June 1951, the Secretary of the Navy approved the former style of jumper (shirt-type shoulders and buttoned cuffs) and this will remain regulation.

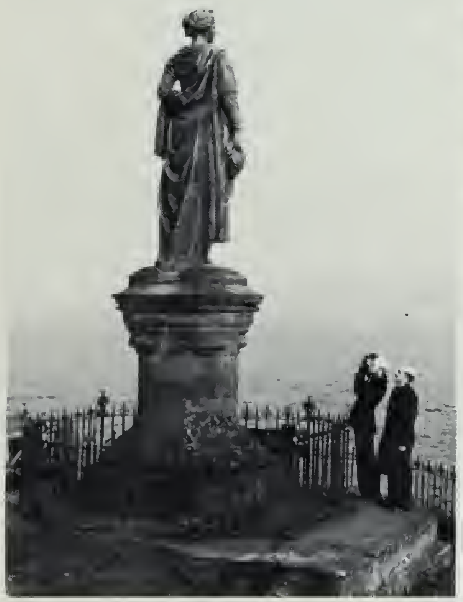
15 YEARS AGO

Some time in March, Navymen of Operation Deep Freeze at the Naval Air Facility at McMurdo Sound were able to look at the first glow of light generated by McMurdo's $4.5 million nuclear-power plant. Called PM3A, the plant provides 1500 kilowatts of electrical power for McMurdo. The heart of the plant is a pressurized water reactor containing uranium provided by the Atomic Energy Commission. The weather station generator, which is a finned cylinder only 21 inches in diameter and 19 inches high, requires no moving parts. Heat provided continuously by radioactive pellets at the center of the unit is transformed directly into electricity by thermocouples. The entire unit will take the place of storage batteries which required replacement every few months.

Stern Shots

Through the years, recruiters have encouraged young men and women to "Join the Navy and see the world." How many of these liberty ports can you correctly identify?

A



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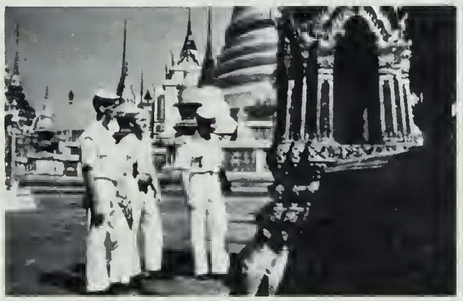

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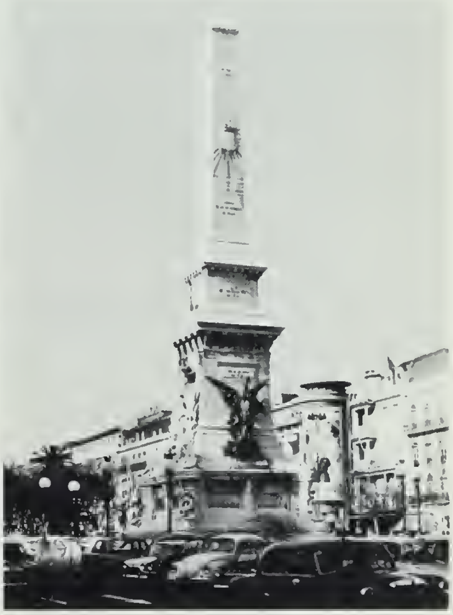

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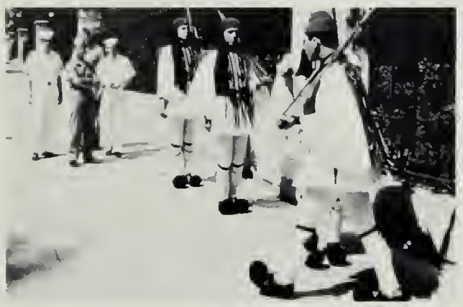

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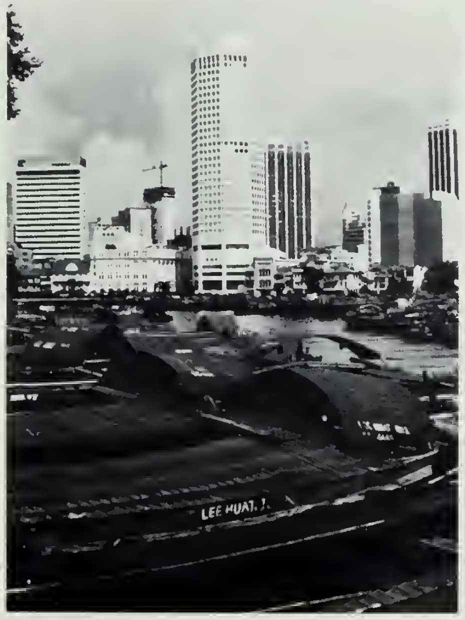

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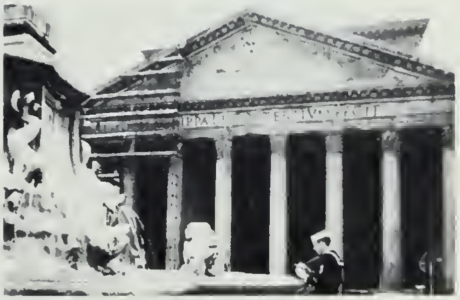

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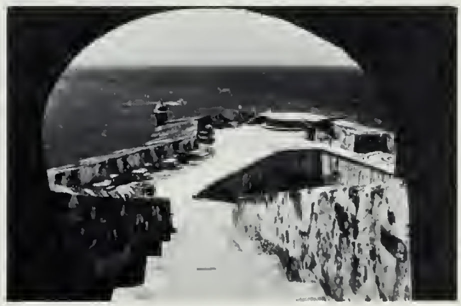

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ALL HANDS

SECNAV INTERVIEW

LIBRARIES

JULY 1977

COMMANDER IN CHIEF JIMMY CARTER
USS LOS ANGELES SSN-688

THE PRESIDENT OF THE UNITED STATES—Jimmy Carter, protected against the drizzle, stands atop the sail of USS Los Angeles *(SSN 688) as it returns to Port Canaveral, Fla., after a day's operations. The President, accompanied by his wife, Rosalynn, and Admiral Hyman G. Rickover, spent nine hours at sea on May 27.* Los Angeles, *the Navy's most advanced nuclear submarine, is commanded by Commander J. C. Christensen (far right). (Photo by JO1 P. Sundberg)*

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Back Cover: International Azalea Festival photos by PH1 Terry C. Mitchell.

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Currents

President Carter Visits Attack Sub Los Angeles

● President Jimmy Carter and Mrs. Carter took a one-day trip aboard USS *Los Angeles* May 29, off Florida's east coast. The presidential party boarded the attack submarine at Port Canaveral, Fla., early in the morning and returned about 1800. The crew demonstrated the submarine's propulsion plant and maneuvering capabilities. The President never had been aboard a nuclear-powered submarine. He served aboard diesel subs while in the Navy and was in the nuclear power program immediately before leaving the service in 1953. Also accompanying the President were Admiral H. G. Rickover, Director of the Navy's Nuclear Propulsion Program, and Vice Admiral Joe Williams, Commander Submarine Force Atlantic. *Los Angeles* is commanded by Commander John Christensen.

Vice Admiral Gravely Honored By Ebony Magazine

● Vice Admiral Samuel L. Gravely, Jr., Commander Third Fleet, was chosen in the May issue of *Ebony* Magazine as one of the nation's 100 most influential Black Americans. A native of Richmond, Va., Vice Admiral Gravely achieved flag rank in 1971. His recent assignments have included: Director of Naval Communications and Commander Naval Telecommunications Command; Commander Cruiser Destroyer Group Two; and Commandant of the Eleventh Naval District, before assuming three-star rank and taking command of the Third Fleet in September 1976.

President Awards $25,000 to NavSea Civilian

● Lawrence Guzick of the Naval Sea Systems Command received a $25,000 award from President Jimmy Carter for inventing a steam line drain orifice assembly that already has saved $10 million in the first year of implementation. Guzick, deputy director of NavSea's aircraft carrier ship logistics division, received the award at a White House ceremony in May. His invention is a replacement for steam traps in high pressure steam systems aboard ships; to date, it has been installed in more than 100 ships. The $25,000 award, the largest award granted under the Federal Incentive Awards Program, has been approved only five times since 1954, when Public Law 83-873 was passed, establishing the program. Two of the five previous recipients were Navy employees.

New Graduate Study Program For Officers Announced

● Navy line and staff corps officers now may attend graduate school full time while drawing full pay and allowances under a new program announced by the Chief of Naval Education and Training. Under the Advanced Education Program, selected officers, O-2 through O-5, may study for up to one year toward a graduate degree consistent with their designator and subspecialty requirements. Officers will pay for tuition and other expenses with their pay and GI Bill benefits. The new program may be used following enrollment in other education programs as long as the total time in school does not exceed two years. Details are in CNETINST 1520.7A. The application deadline is Aug. 1, 1977, for the first annual selection board which will be held in late September 1977.

Navy Shuttle Astronaut Nominees Selected ● The Navy Selection Board, considering 325 applications for the NASA Space Shuttle Astronaut Program, has completed its deliberations and has forwarded 90 nominations to the Department of Defense. Release of names of Navy nominees will be made after DoD receives nominations from all military services. A joint military nomination list was scheduled for release in late June. The final space shuttle astronaut selection (15 pilots and 15 mission specialists) will be made by NASA after the review of applications of all military and civilian nominees is completed.

DSV Loaded Into C-5A During Test ● A major step in the development of a worldwide fast response capability to provide support for submarine rescue missions and underwater hardware recovery operations was accomplished during May with the successful first test load-out of a deep submergence vehicle in a C-5A aircraft. The test involved loading *Sea Cliff (DSV 4)* into the aircraft along with enough equipment to support five dives. *Sea Cliff* is 26 feet long, carries a crew of three and is capable of diving to depths of 6,500 feet.

Annual Dental Check-ups Now Mandatory ● Secretary of the Navy W. Graham Claytor, Jr., has initiated a new preventive dentistry program that requires all Navy personnel to have an annual dental and periodontal examination. All Navy commands have been directed to ensure that their personnel receive their annual check-up. Active duty personnel also are required to have a yearly stannous flouride treatment that can be either self-applied or professionally applied. Details are in SecNavInst 6600.1B.

All-Navy Talent Contest for 1977 Announced ● The 1977 All-Navy Talent Contest will be held this year at Naval Training Center, San Diego, Calif., November 14-18. All Navy, Marine Corps and Coast Guard personnel on active duty for more than 90 days who are not eligible for release from active duty prior to Nov. 30, 1977, are eligible to participate. Individuals or groups desiring to participate should submit a special request chit and one completed copy of NavPers 1710/15 (Entry Form for All-Navy Talent Contest) to their commanding officer or officer-in-charge no later than Aug. 15, 1977. Competitions will be held at the local level with winners participating in their respective district or regional competitions. First place acts of district or regional competitions are guaranteed a place in the 1977 All-Navy Talent Contest. Elements of the Sixth and Seventh Fleets will participate in local and district or regional contests held at the nearest shore installation. Contact your local Special Services Director or Officer for more information.

Navy To Conduct Safety Workshops ● Safety workshops covering accident investigation and reporting, OSHA (Occupational Safety and Health Administration) Regulation implementation, industrial hygiene, motor vehicle safety will be conducted October 31 through November 4 in Norfolk, Va., and November 28 through December 2 in San Diego, Calif. The workshop is aimed at military and civilian safety managers/engineers and other key personnel involved with the implementation of Navy safety programs. Additional information can be obtained from NavSafeCen, Norfolk (Code 41), autovon 690-1188.

Meeting
The New Secretary

All Hands recently had the opportunity to sit in on a roundtable discussion between the new Secretary of the Navy, W. Graham Claytor, Jr., and six representatives of the Navy family at large. Secretary Claytor, a native of Roanoke, Va., is an experienced attorney who, during World War II, had command of three Navy ships. For almost 30 years he was a member of a distinguished Washington, D. C., law firm and, for the past 10 years was associated with the Southern Railway System, most recently as its chairman of the board. Here, then, is a conversation with the Secretary:

AFCM Rose: "Mr. Secretary, how has the Navy changed since you saw service in World War II?"
Secretary Claytor: "Well, it's changed a great deal physically. The ships are much bigger; electronics are, of course, much more important; we can intercept "incomings" farther away. It's much more technically proficient, and takes more highly trained people. But the people are the same—they're good. You had to have good people in the Navy then, and you must have them now. So, except for the technical developments, and the requirement for more technical training, I think the Navy is much the same as it was then. It's a great Navy."

LCDR Doran: "What effect, sir, do you think the President's energy program will have on the prospects for increased steaming time for training?"
Secretary Claytor: "I don't think it will have any adverse effects. The Navy has an extremely good program for conserving energy and making more efficient use of energy. We have, for example, developed a program for much more frequent cleaning of the bottoms of ships, which makes an extraordinary difference in the miles per gallon that you get. We are also developing some new bottom paints which are far more effective in preventing fouling than anything we've had. If you can prevent the fouling of ships' bottoms, you can go for as much as four or five years without the drag of barnacles. A recent study indicates an extraordinary difference in fuel efficiency. Readiness for the Navy and Marine Corps is a function of underway days for ships and training flight hours for military aircraft. It is essential that ship and aviation crews and our amphibious forces receive realistic training at sea. We must effect continued energy savings—but without sacrificing readiness. So, I don't think the energy situation is going to reduce our steaming hours. I'm not going to let it. Readiness is the name of the game."

The six people who met recently with the Secretary of the Navy are as diverse as the questions they posed to Secretary Claytor in his Pentagon office. The questioners were men and women, civilian and military, officer and enlisted, fleet and staff:

Lieutenant Commander Walter F. Doran is a 31-year-old native of Menands, N.Y. A graduate of Villanova University, Doran is presently assigned in the Pentagon in Washington, D.C. He has seen service as First Lieutenant and Weapons Officer aboard USS *Boulder* (LST 1190), and aboard surface ships in the Atlantic and Pacific.

Lieutenant Marianne Rosel is assigned to Navy Recruiting District, Washington, D.C. The 26-year-old recruiter is a graduate of Bellarmine College, Louisville, Ky., and a native of Junction City, Ky.

AFCM William H. Rose is assigned to Naval Air Station, Oceana, Va., where his duties include that of leading chief and maintenance CPO. The 41-year-old native of Winginia, Va., lives with his family in Virginia Beach.

MM2(SS) Michael S. Churilla, Jr., is a 20-year-old native of Leonardtown, Md. The 1974 graduate of Ryken High School in Leonardtown is presently assigned as a nuclear mechanical operator aboard USS *Spadefish* (SSN 668).

Operations Specialist Seaman John E. Higginbotham is 22 years old and comes from Jamestown, R.I. He is currently assigned to USS *Truett* (FF 1095).

Mr. Paul H. Gilbert, a civilian, currently works as a personnel staffing specialist for the Office of Civilian Personnel, Washington, D.C. A native of Buffalo, N.Y., Gilbert is a 1974 graduate of Howard University, Washington, D.C.

Reenlistment ceremonies aboard USS America *(CV 66).*

"Now, if you want an experiment, and were to get enough qualified women for an all-female destroyer, I'm perfectly willing to take a shot at that."

Arriving aboard America *by helicopter.*

MM2(SS) Churilla: Mr. Secretary, what do you think are the prospects for the new Sea Pay Plan?"
Secretary Claytor: "I am hopeful that the Sea Pay proposal will be introduced in Congress shortly. I have practiced law in Washington for 25 or 30 years and I've learned never to make a prediction about what Congress is going to do. But I think we have a very good chance of getting our Sea Pay Bill through. It may go through this year; it may go through next year, but I think we'll get it."

MM2(SS) Churilla: "Do you see any prospects in the future for changes in submarine pay or other types of incentive pay?"
Secretary Claytor: "I anticipate that the whole military compensation system is going to be under fairly intensive review in the course of the next year or two. This study is going to be made by a Blue Ribbon Panel appointed by the President. I think it will consider basic pay, incentive pay, benefits—the whole works. And, once that study's been completed, I think we'll begin to get some final answers."

Mr. Gilbert: "One of the major objectives of President Carter's administration appears to be the reorganization of the Federal Government. How do you feel that will affect the Department of the Navy, and, specifically, the civilian work force?"
Secretary Claytor: "We've already made some changes in the Secretariat. We have reduced the number of Assistant Secretaries from four to three. All the services have done that at the direction of the Secretary of Defense. And we are attempting to increase efficiency so that we can reduce the number of civilian employees working in the Navy. But, any reductions will be through attrition. Efficiency is the name of the game in any business; to get the same amount of work done with less manhours and less people. But beyond continuing to push for additional efficiency, I don't foresee any major change that is likely to take place that will affect people."

OSSN Higginbotham: "Mr. Secretary, what is your opinion of the erosion of service benefits; and, what do you think the Navy is going to do about it?"
Secretary Claytor: "Well, I think there is more fear of future erosion than of actual erosion that has taken place. There have been some changes that could be classified as erosion, but for the most part they're minor. The worry of most people I've talked to is that there will be some major change that

LCDR Doran: Why were the strike cruiser and the patrol hydrofoil programs cut?

Mr. Gilbert: How will President Carter's reorganization of the Federal Government affect the Department of the Navy?

MM2 Churilla: Do you see any prospects for future change in submarine pay or other types of incentive pay?

will adversely affect the benefit and fringe package in the future. The President's Blue Ribbon Panel should answer a great many questions about the future. One thing I am fairly certain about is that adverse changes regarding the retirement system will not take away vested benefits that people already have. In other words, there will be some kind of grandfather clause protection."

LT Rosel: "Mr. Secretary, what are your feelings about the Navy, both as a career field and in terms of a shorter enlistment for today's high school and college graduates?"

Secretary Claytor: "I think for the long pull, a lifetime career in the Navy is a very attractive life and lifestyle. It is an honorable and satisfying profession and one, I think, that is well compensated. For those who don't want to make a lifetime career of it, the Navy still offers an extremely good educational experience. I spent five years in the Navy myself and the experience I had has been valuable to me all my life. I think for a young man or a young woman just out of high school, nothing is more valuable than gaining the kind of maturity, responsibility and broadened view of life that a tour in the Navy offers. I think it's just the greatest training ground in the world. I don't mean training in the sense of teaching you how a radar works. That's an extra added attraction if you're in a technical area. But assuming you don't learn anything except how to conduct yourself in the Navy environment, that's still a very valuable lesson. It will help you all

Inspecting the Marine Corps Development and Education Command, Quantico, Va.

OSSN Higgenbotham: Mr. Secretary, what are your views on unionization of the military?

LT Rosel: How soon do you think a change in the policy of women serving aboard ships might be implemented?

AFCM Rose: What about the future of the V/STOL aircraft carrier?

Cutting cake aboard America; *chatting with U.S. Naval Academy midshipmen (photo by Dave Eckard); observing* America *refueling from USS* Milwaukee *(AOR 2) and commissioning USS* Cincinnati *(SSN 693).*

your life. I think it's a great opportunity. More and more people are beginning to realize that and the anti-military public opinion of the late '60s and early '70s is disappearing fast.

AFCM Rose: "Sir, the aviation community would be interested in your views about the future of the aircraft carrier, and particularly the VSTOL (Vertical/Short Takeoff and Landing) aircraft carrier."
Secretary Claytor: "The aircraft carrier is absolutely the backbone of the surface Navy without any question, and will continue to be as far into the future as we can possibly see. I don't draw a distinction between today's aircraft carrier and a VSTOL carrier in terms of mission. The carriers we are now building will, under the Service Life Extension Program, be overhauled eventually to increase their longevity. So, the large carrier will remain an important Navy ship well into the 21st century. But large carriers will be joined, in my opinion, by a larger number of much smaller carriers as we develop planes that no longer require a 1,000-foot deck for take off and landing. With VSTOL aircraft you don't have to have catapults or arresting gear. A smaller VSTOL carrier will cost much less than the *Nimitz*. Predicting what the Navy will look like 25 years from now involves some guesswork, but my guess is that there will be more carriers than we now have, and that there will be some large-deck carriers and a large number of smaller VSTOL carriers.

LCDR Doran: "Mr. Secretary, continuing the look at the future development of the Navy, why were the strike cruiser and the patrol hydrofoil programs cut?"
Secretary Claytor: "In a word, money. They cost too much in the view of the government. So did the additional nuclear *Nimitz* class carrier. If you are going to spend that much money on one ship, there is a danger that there won't be enough left to spend on other things that we have to have. If there were more revenues available, ships like the strike cruiser, the patrol hydrofoil and another *Nimitz* carrier would be solid additions to the fleet. But the hydrofoil which, in effect, is a modern motor torpedo boat with missiles, would have cost about $65 million a copy. That's a very effective, very modern, but very expensive motor boat. Sixty-five million dollars is more money than we can allocate for that type of operation. The same is true with the strike cruisers. The *Virginia* class cruisers, which are nuclear cruisers now being built, will have *Aegis* defense systems and will accomplish a significant part of what the strike cruiser would have accomplished. And, we'll be able to have more of them. The one thing a large, expensive ship, however capable, cannot do is be at two places at once. We've got an awful lot of ocean to

cover and we've just got to have a greater number of low-cost ships; and that means some sacrifice of more expensive, more sophisticated ships."

OSSN Higginbotham: "Mr. Secretary, what are your views on the unionization of the military?"
Secretary Claytor: "Coming from a unionized business, I have dealt frequently with unions and have many friends among union leaders. I believe the labor union movement is a healthy movement in this country, but I believe it has absolutely no place in a military organization. There just can't be a division of authority in the conduct of effective military operations. Unionization doesn't belong in the military and I don't believe it ever will. The President has been clear in his opposition to military unionization, as have the Secretary of Defense and I."

LT Rosel: "I have read that you have commented on women serving on board ships. How soon do you think a change in this policy might be implemented, and how extensive would it be?"
Secretary Claytor: "Well, a bill to repeal the current prohibition against having Navy women aboard ship has been submitted to Congress. I'm hopeful that it will get through this year because the present law is a clear case of overkill. My own belief is that women should be able to serve on noncombatant vessels, of which the Navy has a good many. Women should also be able to serve aboard combatants on a limited basis, such as for short-term training or transportation. I don't think, however, that we ought to have women serving full time on combatant vessels. I feel strongly about that, based on my own Navy experience. I commanded a destroyer escort in the Pacific for some 12 months and we almost never entered a civilized port in that period. We were cooped up in a ship that was tiny by today's standards. The only recreation was an occasional stop at an atoll when you could take half the crew ashore for two hours with a case of beer, and play a game of baseball. Then the other half would go ashore. That was the only recreation you got for four weeks or more. Had we had a mixed crew, male and female, with no recreation and no port visits, there would have been trouble. That's not any reflection on either men or women; it's just the way life is. When you're cooped up on a submarine or a ship for some time, human relations can get a little strained—even among men. Now, if you want an experiment, and were to get enough qualified women for an all-female destroyer, I'm perfectly willing to take a shot at that. I have no reservations about the abilities of women.

LT Rosel: "It would be extremely hard, though, since you don't have the expertise among women at all the senior petty officer levels."

Secretary Claytor: "Well, we may be getting it; we may be getting it down the road. It's not that women can't do this. I just don't want the problems associated with having men and women together under the kind of environment you have on a fighting ship in wartime. If you're not going to have them on a fighting ship in wartime—and that is clearly prohibited by law—you had better not have them regularly assigned to the ship in peacetime, because when you have to go, you've destroyed your readiness by losing part of your crew.

AFCM Rose: "Mr. Secretary, what are your views about the relative worth of the U.S. and Soviet sailor?"
Secretary Claytor: "I think the greatest strength we have is in the competence of our people compared to theirs; and that's partly due to our system. Our system calls for giving responsibility to our people—not just to the officers, but to the entire crew. Our people are trained to accept responsibility and make decisions when they have to; not just follow a standard procedure or go ask the next fellow what to do. There

are many, many examples of that in our Navy. And this is our greatest strength. I think, of course, our ships are highly sophisticated, and technically better than theirs. But the biggest advantage we have is in our people, in their attitudes and training and in their willingness to accept responsibility and show initiative."

LCDR Doran: "Mr. Secretary, there's been much recent discussion concerning the loss, or possible loss, of certain unique Navy training sites, such as Kahoolawe in the Pacific. What is the outlook for maintaining such sites in the future?"
Secretary Claytor: "I think we are going to continue to be able to use Kahoolawe and, hopefully, other such sites. They are absolutely essential for operational training. I fired at Kahoolawe during the war on my way out to the South Pacific. If we hadn't had that training, I don't think we could have hit the islands we were later shooting at. The value of this kind of training, compared with simulated exercises, can't be emphasized enough. Simulation can assist in training, but you ultimately need to go out and see if the systems really work the way you think they will. Usually, you learn something that doesn't come across in a simulated exercise. We've got to have some non-simulated training if we're going to have a ready Navy. I'm absolutely as strong as can be about that."

MM2(SS) Churilla: Those of us in the submarine Navy are watching the progress of Project *Seafarer*, a communications system that will permit receipt of messages while remaining deeply submerged. It's a controversial system. What's the outlook for it?"
Secretary Claytor: "Well, I think we've got to develop some system of communicating with submarines while they're down deep. *Seafarer's* the one system that we have worked out technically. We would like to develop an experimental site in Michigan. Those experiments will help tell us how extensive the final system must be. It may be that we can do the *Seafarer* job with somewhat less of an installation than we initially proposed. The capability we are seeking is a vitally important one in terms of national security."

OSSN Higginbotham: "Sir, what is your opinion of Navy recruits since the draft ended?"
Secretary Claytor: "Well, based on the few I've met, and the reports I receive, we are doing better than anyone thought we possibly could. We are getting a very high percentage of high school graduates in the Marines and in the Navy. We've got to have high quality people and we seem to be getting them. I am hopeful that we can continue to get even more."

MM2(SS) Churilla: "Mr. Secretary, you recently made your first visit to the fleet since becoming Secretary. What did you think?"
Secretary Claytor: "Oh, I was enormously impressed. My visit to USS *America* was a first for me. During the war, I had picked up some aviators who went in the drink, but I never got a chance to go aboard a carrier, and the operations aboard *America* were extraordinary—beautifully timed, engineered and executed. Then I went over to the *Iwo Jima*, and then the *Spruance*. *Spruance* would have been more like a heavy cruiser than a destroyer during my previous Navy career, but it is a great ship. I also got a chance to meet with several members of the crews informally, and chat with them without anyone looking over our shoulders. I found them to be just about like the kids I'd worked with when I was in the Navy. They haven't changed much. Great guys!"

LCDR Doran: "Thank you very much for answering our questions, Mr. Secretary."
Secretary Claytor: "It was a pleasure. Thank you." ⚓

The Indianapolis Rescue

Judgment, Initiative, Skill and Motivation

BY JO1 JERRY ATCHISON

The new Secretary of the Navy, W. Graham Claytor, Jr., recently told an audience of Navy and Marine Corps supporters that "people are the most important thing in the Navy." In support of this, he named four factors—judgment, initiative, skill and motivation—that are consistently demonstrated by Navy personnel, and make people "the Navy's greatest strength."

These four leadership principles have figured in the Secretary's own rise to the top. Service as a commanding officer during World War II provided Claytor an early opportunity to observe and practice them under the conditions where they count the most.

Entering the Navy as an ensign in 1941, he was promoted to lieutenant commander before release from active duty in 1946. By then, he had served as commanding officer of the submarine chaser USS *SC 516*, and the destroyer escorts *Lee Fox* (DE 65) and *Cecil J. Doyle* (DE 368).

One event during World War II required Claytor to summon all his leadership traits—and then some. On July 30, 1945, the heavy cruiser USS *Indianapolis* (CA 35), was steaming from Guam to Leyte in the Western Pacific when she was torpedoed twice by a Japanese submarine. The ship sank in only 12 minutes. About 350 to 400 of the 1199 men onboard were killed in the explosion or went down with the ship. More than 800 men made it into the water alive.

But this was just the beginning of the ordeal for those survivors in the water whose fate was unknown to the outside world. Because of a series of events that included garbled messages and human error, no one knew where *Indianapolis* was or when she was expected to arrive in port. The men in the water were on their own.

It became an ordeal that would not end until 84 hours had elapsed and more than 500 of those survivors had died awaiting rescue. It was an ordeal that would finally end, thanks in part, to USS *Cecil J. Doyle* and her skipper who took the initiative—LCDR Claytor.

As *Doyle* was steaming south, about 50 miles from Babelthuap, the largest of the Palua Islands, Claytor spotted a

USS Cecil J. Doyle *(DE 368), launched July 1, 1944, was later commanded by Secretary Claytor during World War II.*

USS Indianapolis (CA 35)

PBY patrol plane on an opposite course. He hailed the plane on radio when it was overhead and discovered it was piloted by an acquaintance of his from Peleliu. The news, however, was anything but reassuring. The pilot passed the word that a large oil slick had been sighted and that many men had been seen in the water. The pilot told Claytor that he would probably be getting orders to head for the scene and assist in the rescue.

But Claytor knew that communication log jams could delay orders for his ship. So *Doyle* was brought about and headed for the disaster as her skipper rang up full spead ahead. The ship was soon moving through the water at top speed.

Sure enough, the critical orders came through for *Doyle* an hour and one-half later. It is not possible to say how many lives Claytor's "stolen" 90 minutes saved, but not one who survived would have questioned the action.

Arriving first on the scene, Claytor had to worry about running the men down in the water. He also had to take a calculated risk.

In his 1958 book about the sinking of *Indianapolis, Abandon Ship*, Richard F. Newcomb described the difficult decision Claytor had to make:

". . . Despite warnings of submarines in the area, Claytor ordered one 24-inch searchlight beamed forward, with bow lookouts to watch for survivors, and the other 24-inch light pointed skyward, as a beacon of hope for those in last extremities. And it was, for men 60 miles away saw it shining on the clouds. It gave them the last ounce of courage they needed."

On radar, *Doyle* picked up a patrol plane that had ditched at sea in an effort to assist survivors. The ship pulled up and sent her boat over to see what was up.

Newcomb again: "Until this time, Lieutenant Commander Claytor and his officers still had no intimation that a major vessel had been lost. The most logical assumption seemed to be that several B-29 s returning from a raid on Japan had missed their Marianas bases and ditched in this area.

"When the boat came back with a load of survivors, one of them made his way to the bridge and announced:

" 'This is all that is left of *Indianapolis*. We have been in the water four days.' "

"Claytor immediately summoned the communications officer and dictated the following message for Commander, Marianas, Vice Admiral Murray:

" 'We are picking up survivors of USS *Indianapolis*, torpedoed and sunk Sunday night. Urgently request surface and air assistance.'

" 'And make it secret and top priority,' Claytor said.

"In five minutes his communications officer was back to report that Guam could give him a position on the top priority waiting list that might be reached in an hour.

" 'Make it urgent,' Claytor said. He did, and Guam cleared the air and took it in at once.

"This was the first definite word to get through . . ."

On July 30, 1977, thirty-two years to the day after sinking of the cruiser *Indianapolis*, Secretary of the Navy W. Graham Claytor, Jr., will be present at Groton, Connecticut, for the launching of the nuclear attack submarine *Indianapolis* (SSN-697). It will be an occasion that blends good feelings about the Navy's future with memories of a tragic event in its past. For those intimately familiar with the *Indianapolis* disaster and rescue mission, the leadership traits which Secretary Claytor recently addressed will hold special meaning. ⚓

Frances Claytor

Navy Wives' Advocate

When Secretary of the Navy W. Graham Claytor, Jr., brings his work home, he will have a knowledgeable dinner partner with whom to discuss it. His wife, Frances Claytor, was commissioned an ensign in the Navy in 1942, and rose to the rank of lieutenant commander before her release from active duty in 1946.

"I grew up in a rather sheltered time after World War I," Mrs. Claytor recalled. "When the Second World War came, I felt we had a job to do; women couldn't just sit home. I knew there was a Womens' Army Corps, but I wanted to join the Navy."

Mrs. Claytor served on the staff of the Commander Eastern Sea Frontier in New York. "I was in Ships' Plot," she said. "It was our job to keep track of ships and convoys crossing the Atlantic. I wouldn't exchange anything for those four years."

The Virginia native sees many changes in the life of Navy women since her own tour of duty. "The pay—for everyone—is certainly far more," she observed. "Today, women are getting jobs we would have gladly taken back then. Today's women serve overseas, and do all manner of jobs that used to be exclusively reserved for men."

When she learned that her husband had been appointed Secretary, she was as delighted for him as for herself. "He has always retained an interest in the Navy," she said. "It's been a lifelong love affair of his, along with railroads."

Asked how she viewed her own goals as wife of the Navy Secretary, Mrs. Claytor said that she plans to serve as a listening post for Navy family matters.

"As I make contact with Navy wives, hear their problems, concerns and interests, I will report back to my husband," she said. "I hope to be able to put in a few good words for Navy wives and families whenever possible, and I know he'll listen."

"I would also hope to see continued expansion of the role of Navy women in uniform," Mrs. Claytor continued. "If there is any way I can help bring that about, I would certainly like to try."

Mrs. Claytor had some advice for Navy wives. "I think you have to support the men in every way," she said. "You have to be interested in the Navy and learn all you can about it. You'll be much better able to help your husband in his career if you do." ⚓

LAMPS
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LAMPS

Surveillance Beyond

BY JO2 DAN WHEELER

When Lamps Mk I (light airborne multipurpose system) first deployed in 1971, it brought an air-Anti-Submarine Warfare capability to ocean escorts, destroyers and frigates. Enhancing their already formidable sensor and ordnance arsenal, Lamps provided surface escort combatants with a detection and weapons delivery capacity extending well beyond the horizon without the aid of land-based or carrier-based aircraft.

Traditionally, our escort combatants (when not operating in the company of a carrier) have been severely limited in carrying out their antisubmarine and antiship surveillance and targeting (ASST) functions by their inability to "see" past the radar horizon or "hear" sounds outside the ranges of direct-path sonar systems like those depicted in World War II movies. The surface fleet first tried to overcome these limitations by developing longer range sensors and, consequently, more powerful weaponry. Direct-path sonars gave way to the more powerful AN/SQS-26 and towed-array sonars (capable of "seeing" deeper than ship-mounted systems), which can detect contacts as far away as 40 to 80 miles from the ship, depending on water conditions.

Eventually the various sonar systems developed to the point that their ability to detect distant underwater objects exceeded their capability to accurately classify them without external confirmation from another ship or aircraft. Even with confirmation, few ships had weapons sufficiently powerful or accurate to attack at such ranges. The destroyer-helicopter team called Lamps has overcome these limitations by enabling escorts to telescope their electronic surveillance and weapons beyond the horizon, via helicopter.

The most visible component of the Lamps Mk I system—used fleetwide today—is the helicopter. The first bird—the SH-2D—was a modified version of the SH-2 *Seasprite*, the search and rescue (SAR) helo familiar to most sea-going Navy men. SH-2D incorporated the best of many ideas into one airframe designed to meet the requirements of a CNO directive—develop a functional, manned helo which can operate from the deck of an escort combatant and perform many separate missions including ASW air support.

The SH-2D proved the concept was valid, but it was replaced by the technologically superior SH-2F, the helo in use today. The "foxtrot" has the same mission the "delta" had, but performs it with updated equipment. Foxtrots carry a three-man crew (pilot, co-pilot and sensor operator); its basic equipment includes:

the Horizon

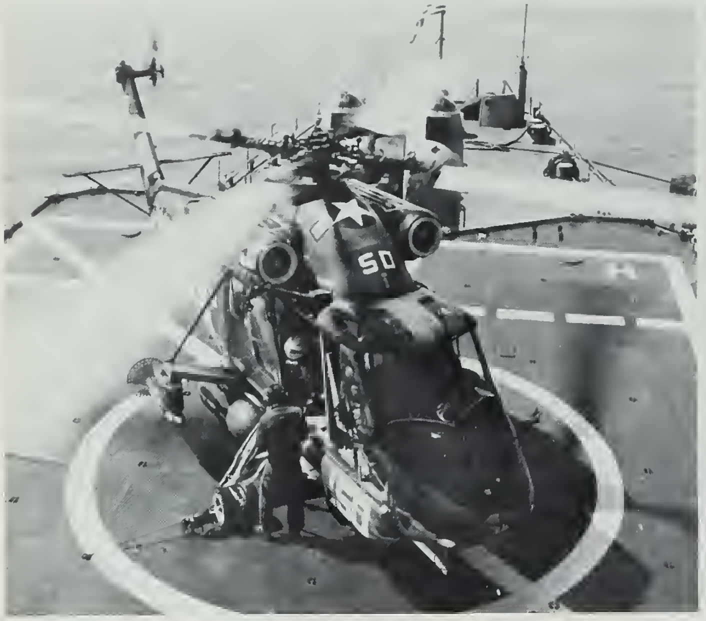
- LN 66 RADAR—Most ships use this Marconi fishing boat radar for harbor piloting. Lamps uses it to detect ships and other small contacts not always visible on conventional shipboard radar.
- DATA LINK—Information collected from sonobuoys is relayed to the ship and helo via a data link. Both active and passive data collected by sonobuoys is relayed to special equipment in the ship's Combat Information Center for interpretation. Each helo has the capability to decode active signals in case it must operate independent of its ship. Most acoustical data, however, is analyzed onboard ship.
- MAD—Magnetic anomaly detector gear signals the presence of metal underwater by means of reading variations in the earth's magnetic field. MAD is another piece of equipment that can be used to classify a contact with more certainty.
- ESM—Electronic signal monitoring gear is basically threat warning equipment used to detect pulses emitted by another ship's electronic equipment. Its main purpose is to alert the ship that another vessel—and a possible missile threat—lay somewhere over the horizon.

Most of the cumbersome, heavy, but delicate components of the Lamps Mk I are located in the ship, thereby enabling a lighter and smaller helo to attain speeds up to 130 knots, stay airborne for up to two and a half hours and land on smaller vessels due to a reduced helo "footprint." Even though the ship carries most of the monitoring equipment, the system is practically useless if the Lamps helo is lost or malfunctions. However, if shipboard gear malfunctions, the helo can continue to carry out several of its search and attack functions and, once finished, land on another Lamps-equipped ship if necessary.

The Navy now has more than 70 ships with Lamps capability and three complete Lamps helo squadrons on each coast—enough helos to put one on every deploying Lamps capable surface combatant. Lamps detachments, however, are not permanently stationed on any one ship. Each detachment—consisting of three pilots, two aircrewmen and eight maintenance people—comes aboard a vessel about two weeks before it is about to get under way, usually for a major deployment or exercise.

Previously, not more than one or two detachments, at the most, would deploy in any one ship squadron, but now it is common for several ships in the same squadron to carry Lamps helos.

Once on board, the detachment becomes the ship's air department and its officer in charge becomes the air depart-



ment head. The air department and other combat departments work together closely and exchange ideas to improve the ship's overall combat effectiveness, especially in regard to air-ASW. Lamps becomes an integral part of the ship's combat system and is just as much a part of the ship's weapons system as its ASROC, missiles, guns or torpedoes.

Under actual conditions, Lamps would integrate with the ship's ASW function like this:

- Shipboard sonar makes and holds contact with a "possible sub" located about 10-20 miles away. CIC is alerted and the ship goes to general quarters.
- The air department readies the helo and it is airborne within 30 minutes under normal underway steaming conditions—it can get in the air in less than 10 if an alert is expected.
- Once airborne, the helo speeds toward the contact and drops sonobuoys to localize and pinpoint the "possible's" position. (If the contact has been lost in the meanwhile, the sonobuoys and other detection gear on board the helo can help regain contact.) Next it uses its MAD gear to make sure the contact is not some form of marine life. All during this evolution acoustical data is being fed back into the acoustical processor in CIC. The moment the contact is classified "probable sub," the helo can launch a torpedo attack under the direction of the sensor operators in the ship, even though the contact is out of ship-launched weapon range.
- With Lamps in the fleet, submarines can be at a distinct disadvantage. They cannot outrun a helo, and the helo can drop a torpedo at such close range that the subs cannot outrun it either. Lamps can make and hold contact while the ship is out of the subs' weapon range (except in case of missile firing subs) and attack while the task force is steaming toward the location. There is the advantage of surprise, formerly the sacred domain of submarines alone. In fact, a sub may not even know it has been detected until it hears the rotors of the Lamps helo overhead. By then, it's too late.

Though Lamps Mk I is performing well—even better than expected initially—changes are being made to improve its operational capability; Lamps Mk III is currently being developed to incorporate major system improvements in one new airframe constructed from the ground up. This follow-on system will employ a more modern airframe capable of greater ranges and easier maintenance while deployed. Airborne equipment will include a more capable radar and higher sensitivity ESM; a passive directional and command activated sonobuoy system; and improved MAD gear.

Lamps Mk III is on schedule and source selection is currently under way. Mk III avionics have successfully undergone sea testing and the finished product will incorporate state of the art technology.

Like the Mk I, Mk III will have capabilities other than ASW and ASST normally expected of any manned helo:

- Search and rescue missions;
- Medevac;
- Personnel transfer; and
- Vertical replenishment.

The Lamps concept has been proven valid during six years of use at sea and is accepted by the fleet. Most existing surface combatants are now equipped with Lamps capability and all new surface combatants will have the capacity to operate with and carry Lamps helos.

This dynamic combination of ship and aircraft has sparked new life into the surface Navy and caused strategists to rethink some of their old ideas about ASW. As one expert in the surface combatant community stated, "The final implementation of this system in the next decade will be a quantum jump forward for the surface fleet in the role of a submarine hunter." ⚓

LAMPS in the 80s

BY PAUL J. STEVENS

Retaining the best features of the original Lamps Mk I and incorporating the most recent technological advances, Lamps Mk III will provide a significant contribution to the antisubmarine (ASW), antiship surveillance and targeting (ASST) and strike missions of the surface warfare forces.

The most visible component of Lamps Mk III is a manned helicopter that will operate from ocean escorts, destroyers and frigate-class ships. It will provide an elevated platform extending the detection capability of ships' radar and other electronic detection gear. While its primary mission will be ASW and ASST, the Mk III will perform secondary missions such as search and rescue, communications relay, medical evacuation, and vertical replenishment.

Lamps helicopters are part of a Ship/Air Weapons System consisting of eight functional areas:

- SYSTEM MANAGEMENT AND CONTROL monitors and controls the operation of the system as the helo relays data to the ship.
- SENSOR equipment classifies and localizes information collected about submarine and surface contacts made by sonobuoys dropped by the helo. Information is transmitted to the ship via a data link. All data is displayed on shipboard instruments and some of it can be displayed in the helo as well. Additionally, information collected by MAD, airborne 360 degree surface radar, and ESM is relayed by the data link to the surface platform.
- DISPLAY equipment located in both the helo and ship consists of the controls and displays of the system. This equipment aids evaluators in correlating data collected by acoustic, MAD, radar and ESM sensor gear.
- ORDNANCE equipment provides selection, launch and jettison capability for sonobuoys and torpedoes. Provision also is made to determine torpedoes' depth, ceiling, course and operational mode. Sonobuoy selection can be made either manually or automatically, whereas torpedo selection and launch are always done manually by the pilot or tactical control officer in the helo.
- COMMUNICATIONS gear provides secure and nonsecure voice communications between helo and its ship via UHF, HF or secure data links.
- NAVIGATION equipment determines and maintains the helo's and ship's positions with respect to a fixed geographical reference point. Additionally, it provides flight and tactical information to both Lamps and shipboard operators. This equipment also is able to pinpoint the position of deployed sonobuoys for the helo.
- THE SHIP provides support and operating facilities for day/night landings, vertical replenishment and helo inflight refueling. Additionally, capability for helo recovery assist, securing and traversing is provided.
- THE HELICOPTER operates day and night, performing the primary and secondary missions either under ship's control or independently. Each helo is equipped with two engines, a rescue hoist and cargo hook, two Mk 46 torpedoes and 25 sonobuoys.

When Lamps Mk III gets to the fleet (in early 1980s), every Lamps-equipped convoy will be able to "see" enemy ships and submarines at distances never thought possible, thereby greatly strengthening even the smallest force. ⚓

Judo – in Clog

Country

Left: AT3 Danny Fesser, 11th Naval District 209-pound champion, powers into a throw during training at Randolph AFB. Above: JO1 John Yonemura struggles to control his opponent in a grappling drill during training camp in Texas. (Photos by Johnny Rodriguez)

BY JO1 JOHN YONEMURA

The jumbo jet climbed through the light cloud cover and adjusted its course to follow the northern great circle route to Europe.

There were 10 of us, from the four branches of service, wearing blue blazers and gray slacks; this set us apart from the 350 other passengers. We were the U.S. Armed Forces Judo Team, headed for Bergen op Zoom in the Netherlands to compete in the *Conseil International du Sport Militaire* (CISM) Games.

It was a journey that really began March 26 when judo players from each of the services gathered at Randolph Air Force Base in San Antonio, Tex. There we had to win spots on the team and train for the world military championships.

Under Coach René Pommerelle, a sixth-degree black belt trained in Europe, we concentrated on conditioning and tactics. The team worked out three times daily, totaling seven hours. Our *judogis* (uniforms) were constantly soaked; it became as hard to psyche up for each practice as it was to endure the physical training.

Many of us had trained before coming to camp, but a few who hadn't, couldn't take the physical and mental punishment—they dropped out. Two others were injured and also had to drop out. All of us acquired scrapes and bruises and aching muscles, but our tolerance for pain increased with our determination to win.

In judo, the idea is to throw your opponent to the mat with force and control, utilizing his weight and momentum. There are also grappling techniques including strangulation holds and arm-bars. We tried to adopt the European style of overpowering the opponent by superior strength. Contrary to popular belief, strength is important in sport judo. When opponents are of equal ability, strength and endurance make the difference between winning and losing. In self-defense on the other hand, the element of surprise supplants the need for strength.

The team was selected on April 4. For the first time, three sailors made the team: Aviation Electronics Technician 3rd Class Danny Fesser, assigned to VAW-113, NAS, Miramar, Calif.; Electronics Technician Seaman Phil Huebner of Service School Command, NTC, San Diego, and myself.

The rest were Marine Corps, Army and Air Force personnel.

The 10 of us landed at Schiphol Airport near Amsterdam at 1:15 a.m. Easter Sunday, having lost Saturday during the flight. We had three days to recover from jet-lag.

That evening we wandered through the streets of Amsterdam, visiting the *Rijksmuseum* to see Rembrandt's *Night Watch;* and strolled along many of the city's lighted canals. Because of the holiday, there was a carnival-like atmosphere of milling crowds of tourists in various sections of the city.

The next day, a continuance of Europe's Easter holiday, some of us had planned to take a bicycle tour of the tulip fields with stops at cheese shops and windmills. But because of the cold, rainy weather we took a bus instead. For 7.50 guilders (a little over $3) we rode from Amsterdam to Alkmaar, where we had hoped to visit its cheese market (closed for the holiday); to Edam, home of that world-famous cheese; and to Volendam, a picturesque fishing village.

On Tuesday the team left Amsterdam for Camp Ossendrect, a Dutch army base near Bergen op Zoom. Our free time was over—it was time to concentrate on judo.

The next evening we took part in the opening ceremony. It didn't have the grandeur of the Olympic Games, but to us it was impressive. Bergen op Zoom's majestic town hall, a relic of the Middle Ages, cast an imposing shadow over the cobblestoned market square. Local citizenry surrounded the square behind rope cordons. A Dutch band played.

We marched from a narrow, shop-lined *straat* into the square, passed in review before the attending dignitaries and took our place with the 14 other teams. All of the delegations wore their various military uniforms. Beneath the American flag, each branch of the Department of Defense was represented.

The ceremony was conducted in three languages: Dutch, French and English, the official languages of CISM. The Bergenmeister or mayor welcomed all delegations and wished the competitors luck. The Games were declared open.

Thursday we competed in the team tournament. To many of the countries this was more prestigious than the individual competition. National pride was at stake.

In the first round we drew Kuwait, a newcomer to sport judo. Every American won his match and we moved into the second round with high hopes. Against Finland, however, our bubble burst.

That evening, before the large crowd (ourselves included) and TV cameras,

Left: Eleventh ND heavyweight champion, ETSN Phil Huebner, battles for his grip against Shulte of W. Germany. Above: Fesser twists out of a throw by W. Germany's Friederich. His first international competition, Fesser lost a close decision to the experienced German. (Photos by JO1 Yonemura)

the French team beat Italy for the gold medal. Korea and Austria won bronze medals.

In the individual weight division competition that followed, no Americans placed. It was the first time this happened in five CISM Judo Games. We were discouraged to say the least, but at the same time, we were awed by the caliber of those who won, especially the Koreans. They had four men competing in their respective weight divisions and won three gold, one silver. Several of the other teams had veterans of the Montreal Olympics.

As they lowered the CISM flag that following Monday evening, closing the Games for another year, we were already thinking about next year. We had gained a new awareness of the level of competition and the atmosphere of the Games. We now had the determination, one that only comes from experience, to do better next year.

Later that evening, we attended an enormous banquet where we sampled such Dutch delicacies as herring, eel and salmon in addition to chicken and various cheeses and vegetables.

Then we stopped by the pub with our new friends from the other teams where we exchanged lapel pins as souvenirs. Communication was a little difficult but we were able to wish each other well with hopes of meeting again next year.

The next day, Tuesday, all delegations went on a boat tour of Rotterdam harbor. On the bus from Ossendreet to Rotterdam, we rode with Kuwaitis and Finns. The Kuwaitis began singing, clapping hands and stomping feet. We joined in with some American favorites.

During the two-hour cruise, we saw only a small portion of the huge harbor. Reputed to be the busiest seaport in the world, Rotterdam handles over 30,000 customer ships per year.

Early Wednesday morning we left Camp Ossendrect. At Schiphol, another 747 waited to take us home. Before boarding the plane, we scurried around the airport picking up last-minute souvenirs.

Later, cruising at 40,000 feet, we exchanged addresses. We had been together for one month and in spite of the jokes poked at each service, friendships had developed.

All of the miles run, the weights lifted and the judo practiced had given three sailors the opportunity to represent the U.S. Navy in Holland. As all international athletes know, we had been good will ambassadors as well as competitors. The memories will last us our lifetimes, and maybe we can provide the incentive for other Navy Athletes to participate in the CISM Games for their particular sports.

For the Navy's judo players, there are many more miles to be run, many more repetitions of weights to be lifted and many judo skills to be practiced in preparation for next year. First, however, will come the interservice rivalry for spots on the team. And then, Strasbourg, France! ⚓

CISM

...the military's olympics

Millions of people worldwide watched the Montreal Olympic Games on TV. They saw the intensity, the pained concentration of athletes striving for that perfection which would win gold medals.

One-fourth of the competitors were military personnel; servicemen from many nations who had gained much of their expertise through the CISM Games (Conseil International du Sport Militaire), the international military sports council. The games promote worldwide good will through athletics.

But CISM's motives go beyond the competition phase. Research on physical fitness techniques and sports medicine is shared with each of the 70 member nations.

Unlike the Olympics, which brings all events together in two quadrennial extravaganzas (Winter and Summer Games), CISM organizes 15 to 18 world military championships yearly, each sport hosted by a different country.

The calendar of all CISM events is scheduled at annual meetings of the CISM General Assembly. If no nation bids to host a particular sport, it is not held that year. Therefore, only the more popular sports hold championships annually.

CISM sports include: basketball, boxing, cycling, soccer, field hockey, judo, wrestling, swimming, orienteering, modern pentathlon, skiing, shooting, track and field, fencing, rowing and kayak, volleyball, parachuting, bobsled, cross country, weightlifting and sailing.

There are also military oriented competitions—the military pentathlon comprises shooting, an obstacle course, grenade throwing, swimming and cross-country. The naval pentathlon is made up of an obstacle course, lifesaving, seamanship, utility swimming and amphibious cross-country. (The U.S. dominates this sport. Navy Lieutenant Robert Baird of Seal Team One in San Diego has won the individual gold medal the past three years. Though he doesn't plan to compete this year, Baird will most likely coach the team.) The aeronautical pentathlon consists of such events as shooting, swimming, fencing, basketball and an escape test as well as an air rally.

LT Robert Baird

Events to be held during the remainder of this year are: the military pentathlon, August 7-14 in Sweden; parachuting, August 16-20 in Austria; basketball, September in Iran; modern pentathlon, September 8-14 in Germany; shooting, October 4-22 at Fort

Benning, Ga.; boxing, November 7-18 in Egypt; and the naval pentathlon, November 20-27 in Brazil. The next meeting of the CISM General Assembly will be December 7-16 in Syria.

These international competitions are within reach of Navy athletes. But how many have ever even heard of CISM? In some sports (individual and team), intramurals lead to base, district, regional and All-Navy championships. Winners in All-Navy competition are eligible for interservice championships, which in turn lead to national and international competition.

The 84th Congress enacted Public Law 11, authorizing each service to provide its members the opportunity to train and participate in CISMs, Pan-American Games and the Olympics.

But not all sports have preliminary levels of competition for selection to All-Armed Forces teams. In such cases, according to the Navy Sports Program, "Personnel who feel that they possess the high degree of athletic ability required to represent the United States in approved international competition may apply to the Chief of

CISM

...the military's olympics

Naval Personnel (Pers 721) for consideration. An evaluation and certification is made by the appropriate Olympic Sports Committee or national sports governing body."

Training for these events must be performed during off-duty hours. Within the Navy Sports Program "personnel are required to perform normal military duties, but may be given time off to participate in selected competitions or special training periods necessary to prepare adequately for competition or team selection."

For those who have been on U.S. Armed Forces teams participating in CISM Games, the memories will last their lifetimes. The camaraderie developed between athletes is as memorable as the intensity of competitive spirit. They all fought to win but, before the matches, they shared national mementos and, afterward, congratulated the winners.

This above all has been the goal of CISM. The council has indeed advanced athletics. It has shared sports medicine research and improved military physical fitness overall. It has indeed lived up to its motto: "friendship through sports." J.Y. ⚓

Bearings

DD-1 Could Fit in a Passageway

"You could put the old *Bainbridge* in one passageway on this ship," said Harry R. Albrecht, a spry 86 and a 42-year veteran of the Navy, while touring the ship that bears the same name as the vessel he served aboard more than 65 years ago.

A retired chief petty officer (Chief Gunner's Mate and, also, Chief Torpedoman (Aviation)), Mr. Albrecht was the guest of the commanding officer of USS *Bainbridge* (CGN 25) at Bremerton, Wash.

In 1911, the old *Bainbridge's* hull number was DD-1. Mr. Albrecht served in the Navy's first destroyer and is one of the last surviving members of the "Great White Fleet" which circled the globe at the turn of the century. The old *Bainbridge* had a crew of 80, compared to the 500-man crew of the present nuclear cruiser.

While aboard, he saw demonstrations of the modern missile systems, combat information center, radar equipment, berthing and dining facilities.

"We slept below decks with so little room that we couldn't even stand up," he said, "but these quarters today are really something."

The cooks on Albrecht's *Bainbridge* had to contend with coal-burning ovens and had only a six-foot working area.

"A bad cook didn't last too long," he remembered.

The WW I, WW II and Korean War veteran laid out a couple of worn ribbons on a table and asked if anyone could guess what they commemorated. Only silence greeted his question.

"These are homeward-bound pennants," he declared. In his day, homeward-bound pennants were issued to ships returning to port after being outside the continental limits for more than six months.

Recalling the days of coal passers, Mr. Albrecht stated that there was a real art to do that job right. An efficient stoker could save a lot of fuel and increase the speed of the ship just by the way the coal was laid in the furnace. The black gang worked two-hour shifts, depending on the heat.

The veteran Navyman marveled at today's sophisticated detection equipment, and recalled that the torpedomen of his era used the voice tube and good eyesight as their only aids.

After a complete tour of the ship, Mr. Albrecht was the guest of the ship's officers for lunch in the wardroom. He was presented a plaque on behalf of the officers of *Bainbridge*. Later, he displayed a painting of the old *Bainbridge* on silk, depicting the DD-1 as executed by a Chinese artist when Albrecht was serving overseas.

Reminiscing about past service, he spoke of the time his ship was passing through the Strait of Magellan. "It was so cold, we wore every stitch of clothing that we owned. When the coffee was passed below decks to the engine room, the old style coffee pot had a layer of ice across the top of it." That was in 1908.

Many things in the Navy have changed in the past 65 years but one thing remains constant—the pride a sailor feels for his ship, no matter how many years have gone by the boards.

Bearings

60 Years Later, Still Not Sorry—

Historians tell us that man should learn from his past mistakes. But sometimes the events of the past were not mistakes, and are, therefore, worthy of repetition.

Consider 60 years ago when Commander Edwin Pollack, the commanding officer of USS *Hancock* and representative of the President, sailed to the Danish West Indies. The United States had just purchased the islands (since renamed the U.S. Virgin Islands) from Denmark and Pollack was there to hoist the American flag for the first time.

Last March, on the site of the original transfer, Captain George Davis, commanding officer of the USS *Virginia* (CGN 38), repeated the words of Commander Pollack as the U.S. Navy joined with the Virgin Islanders in celebrating the 60th Anniversary of Transfer Day:

"On behalf of the United States of America, I take into custody these Danish West Indies Islands, and I hope that the people of these islands would have no cause to regret the change."

Present-day Governor of the Virgin Islands, Cyril King had an answer for Commander Pollack's words as echoed by Captain Davis:

"The people of the Virgin Islands have held true to the principles of democracy and the preservation of human rights and freedoms."

The reciprocal feeling of the Virgin Islanders was quickly shown as large crowds turned out to hear the evening performances of the Navy Band and joined with the U.S. sailors in celebrating the 60th Anniversary of Transfer Day in the U.S. Virgin Islands.

(Story by JO1 J. Heltsley
Photos By PH1 R. Boyle

MCB3 Rated Tops

WAYTAGO GUYS — Commander James E. McNeill, skipper of Mobile Construction Battalion Three (MCB 3) is presented the Peltier Award, offered annually by the Society of American Engineers. MCB 3 was tapped for the award—here presented by Rear Admiral A. R. Marschall—for their "superior performance" while deployed to Diego Garcia and for "superb response" to the devastation of Typhoon Pamela on Guam in May 1976.

'Hold All Calls . . .'

When ships of Amphibious Squadron Six recently visited the Bay of Vatika, Greece, it gave the local citizens a chance to take a close look at a U. S. Navy ship. Here, the Greek Orthodox Bishop of Neapolis, Greece, tries out the sound-powered phone system on the flag bridge of USS *Guam* (LPH 9).

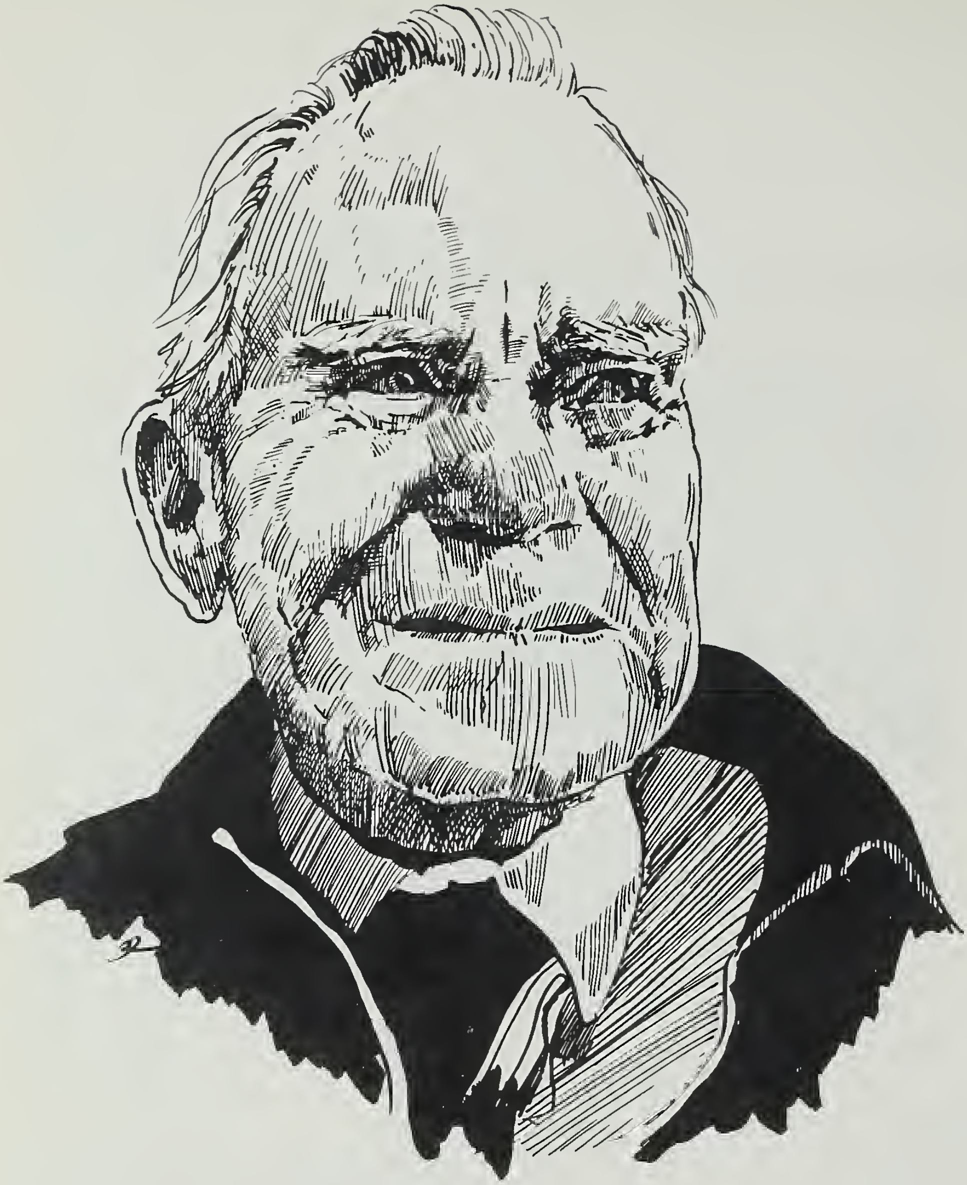
'Angel' . . . Arriving

Eat your heart out Charlie—now *Connie* also has an "angel" and a superhero as well. She's Joanna Cameron, star of the television series "Isis."

Connie is USS *Constellation* (CVA 64). Miss Cameron was dubbed "*Connie's* Angel" after spending a day aboard the the WESTPAC-bound carrier taping TV spots for the ship's closed circuit system. The star, a veteran of more than 100 television productions and one of eight women in the Director's Guild, is considering the possibility of producing a feature on women in naval aviation.

Miss Cameron ended her visit by presenting, as a farewell gift, a life-size portrait from her current movie. In return, she was given a large (but not life-size) picture of *Constellation*.

For *Connie* crewmembers, it was the perfect beginning for a long deployment.



(Extra) Ordinary Seaman Seach

By JO2 THOMAS TOOMER

His adventures could fill a dozen novels, spawn a number of super characters and provide Hollywood writers with enough material for several action-packed movies.

His escapades ranged from the lowlands and jungles of the Philippines to hand-to-hand combat during the Chinese Boxer Rebellion and on to World War I naval action in the North Atlantic. Along the way he rose from cabin boy on one of the last clipper ships to lieutenant in the Navy and was awarded the Medal of Honor.

Would you believe that Lieutenant William Seach, USN(Ret), is 100 years old? Just recently he settled back in his easy chair at the Veterans Administration Hospital in Brockton, Mass., and recalled some of his century of seagoing life for ALL HANDS.

"I had to be an assistant to anyone who needed an assistant," Seach said of his cabin boy days. His chores took him from the cook's kitchen to the crow's nest atop his ship's highest mast. "It was difficult getting up there," he said, "but we boys had to do it . . . it was getting hard to get men for the clipper ships because of the then new coal-burning ships."

Born in London on May 23, 1877, Seach's world bristled with tall sailing ships and roaming European armies carving out worldwide stakes. It was not an attraction to life at sea that put him aboard his first ship. Rather, it was a stern father, who saw shipboard life as a way to correct his son's errant ways.

Seach was expelled from school in the fifth grade about the year 1887. His teachers cited insubordination. Seach took a job as a cabinet maker's helper, but quickly learned that such work would not be his profession, and true to the dime novels of his day he decided to run away from home.

His father, a government-employed civil servant, decided (as did many parents of the period) that a sea-going experience would straighten William out. His father arranged to have him put on the *Canada*, a clipper ship serving as a school sailing ship. It was the beginning of a long seagoing career.

While sailing in a merchant carrying coal from Newport News, Va., to Rio de Janiero, Seach, then 21, heard of the war between the United States and Spain.

When a call went out for volunteers to man the new battleships of the U.S. Navy, Seach and his brother, also a seaman, decided to join the bandwagon, or to be more precise, the battlewagons. They signed on as ordinary seamen in New York on June 9, 1898.

Aboard the Navy transport *Solace,* Seach travelled to the Philippines as part of the peace-keeping force under Admiral Dewey. It was there, fighting in the jungle, that he came to an important conclusion. "I was exactly the right height for the Navy," he said.

"I had the heel of my right shoe shot off and bullet holes riddled my hat. Had I been any shorter or taller, well. . . ."

May 1900 found him with a reconnoitering party as a member of the International Expeditionary Force to North China during the Boxer Rebellion. During a one-week period he and five others fought for their lives against overwhelming odds while trying to gather information on enemy positions. Of that period Seach said: "I really don't remember what I did then, I was too busy to remember."

Three years later, while serving aboard USS *Maine,* his memory was refreshed. "General muster was held," he recalled, "and my name was called: 'Ordinary Seaman William Seach—front and center!' I didn't know what was going on. I knew that I hadn't done anything wrong—I was fussed.

"Then the commanding officer read the citation and proceeded to pin the medal on me but dropped it—and he was fussed."

The skipper of *Maine* was probably "fussed" because it is not every day that a commanding officer gets to pin the Medal of Honor on one of his men. The award ceremony, however, did not end with the dropped medal.

"We both stooped to pick the medal up," Seach said, "and bumped our heads. The C.O. said, 'Well, you pin it on.' . . . that's what I did."

In 1905, Seach took an entirely different voyage.

"The body of John Paul Jones had been located and positively identified in Paris by the American Ambassador Horace E. Porter," Seach said. "President Theodore Roosevelt sent a squadron of ships to pick up the remains. My ship, the new battleship *Maine* (which replaced the one of 1898 fame), met them 500 miles at sea and escorted the lead ship *Brooklyn* to Annapolis. *Brooklyn* carried the remains and flew a vice admiral's flag because John Paul Jones had been a vice admiral in the Russian Navy," Seach explained.

"Yes," he said, "it was a different Navy then." "We got up at 0500, had coffee and about 0530 we started field day. Then we had breakfast and began our daily routine gun drills and target practice."

Seach first reenlisted at the end of the Spanish-American War. He was getting a roof over his head and a place to sleep, plus $19 a month.

"Five dollars each month went for the ship's mess because we had to pay for our own meals. After you bought your uniforms and mess gear, you could do what you liked with the rest."

In 1906, to aid his advancement chances, Seach became a naturalized citizen. His rise through the ranks was swift. Following World War I he was promoted to lieutenant—Perhaps, in part, because of his service during the Great War.

At the outbreak of the war, Seach was assigned to USS *President Lincoln* —a former German luxury liner converted to carry supplies to Europe.

Once, while crossing the North Atlantic, *President Lincoln* was struck by three torpedoes from a German U-boat. Seach was knocked senseless by the blast and the repercussions of the torpedoes. With fire quickly enveloping the ship and ammunition exploding in the magazines, he managed a last-minute escape. The ship sank within 18 minutes of the first hit.

When they saw his officer's bars gleaming in the sun, the Germans from the surfaced U-boat decided to take him as a prisoner-of-war. But fate intervened, the U-boat commander noticed another officer with more brass. They dropped Seach back in the water to await rescue by allied forces. Sometimes, he found out, it pays not to have too much rank.

Six months after the sinking of *President Lincoln,* Seach was hospitalized—almost paralyzed. His colorful, naval career had quietly come to an end. After two years of such hospitalization, he was retired from active duty—Doctors predicted he would only live a matter of months.

Now, on the eve of his 100th birthday, he ponders his life and his will to live. The obvious question had to be asked: Would he do it all over again?

"Yes," said Lieutenant William Seach, America's oldest living holder of the Medal of Honor. ⚓

Will You Weather the Summer Storms?

"... today's weather calls for temperatures in the low eighties with some thunderstorm activity later in the day... followed by clearing this evening..."

BY JO1 PETER SUNDBERG

Thunderstorms are as common to summer as sand is to a beach. Because of their frequency—some 1,800 such storms are in progress at any given moment over the earth's surface—most of us tend to dismiss them as inconveniences of sorts, which just have to be tolerated.

But wait! Thunderstorms can be destructive. Navy personnel are more likely to encounter them, in the open, than most Americans, whether at sea or on the beach. Thunderstorms on land can be very destructive and in one particular case—July 4, 1970—they came close to becoming a national disaster. On that day, thunderstorms struck in 17 states, killed a dozen people, injured more than 16 others, and caused millions in property and crop damage.

The range was broad—north central Mississippi was swept by high winds, heavy rains and almost continual lightning; Tennessee was hit by high winds which capsized boats and killed fishermen; wind and rain played havoc in southwest Georgia; West Palm Beach and Key West in Florida were struck along with Alabama; and the storms "walked" their way up the coast and struck South Carolina, North Carolina and Virginia. Other storms hit Oregon, Texas, Louisiana and New York.

Don't dismiss a thunderstorm.

At maturity, a thunderstorm cloud is several miles wide across its base and may tower to altitudes of 40,000 feet or more. On the ground directly beneath the storm system, the mature stage is initially felt as rain, which is soon joined by a strong downdraft. This downdraft spreads out from the cloud in gusting, divergent winds, and brings a marked drop in temperature. Even when the rain has not reached the ground, the thunderstorm's fury can be recognized by this cold air stream flowing over the earth's surface.

It's in this phase that lightning is unleashed along with hail, heavy rain, high winds, and the most destructive of all its forms, the tornado.

In the event of a thunderstorm it's a good idea to keep

informed of the storm's progress by radio, stay indoors and remain calm. There's not much that can be done at sea except secure all loose gear, ride the storm out or try to evade it.

Lightning kills more people in the United States than tornadoes, floods, or cyclones combined, and most of those deaths could be avoided by the observance of simple safety rules. When a thunderstorm brings lightning, the most important single thing anyone can do is to get inside a house, large building or an all-metal vehicle. Inside, individuals should avoid using the telephone except for emergencies. Other rules to follow:

- Don't stand underneath a natural lightning rod, such as a large tree in an open area.
- Avoid projecting above the surrounding landscape, such as standing on a hilltop, in an open field, on a beach or in a boat in open water.
- Get out of and away from open water. A swimmer can be affected by lightning flowing through the water from a nearby strike.
- Get off of and away from motorcycles, scooters, golf carts, and bicycles; put down golf clubs.
- Stay away from wire fences, metal pipes, and other metal items which could carry lightning from some distance away.
- If in a forest or woods, seek shelter in a low area under a thick growth of trees; in open areas, go to a low place such as a ravine or valley.
- If isolated in an open area, kneel and place the hands on the knees, a position which minimizes the chances of lightning using the body as a conductor.

Ships, electrically grounded, are relatively safe from lightning. As a matter of fact, many ships have been struck and have not been damaged at all. As ashore, lightning is most likely to strike the uppermost part of a ship. It wouldn't be a good idea to climb a radar mast during a storm.

Stepchild of the thunderstorm, the tornado represents another kind of threat. Although they are short-lived and their destructive paths are small, a tornado can transform a thriving street or portion of a city into ruin in a matter of seconds.

These small, severe storms form several thousand feet above the earth's surface, usually in conjunction with a severe thunderstorm. The forward speed of tornadoes has been observed to range from almost no motion to 70 miles per hour, and with a severe thunderstorm, several may be formed along its path. Tornadoes, like thunderstorms, occur in most parts of the earth and in all the 50 states. No area is more favorable to their formation than the continental plains of North America. No season can be called free of them, but normally tornadoes peak in May, with the months of greatest frequency being April, May and June.

While tornadoes usually last only a short time, one was tracked in Illinois for almost 7.5 hours along a path that covered 293 miles in that state and Indiana.

Obeying the following rules could mean the difference between life and death:

- In office buildings, individuals should go to an interior hallway on the lowest floor, or to a designated shelter area if there is one.
- At home, the basement offers the greatest safety, or if that is not possible, family members should seek shelter under sturdy furniture. If the windows in the house are open they should be left open, but any occupants should stay away from windows.
- If caught in a shopping center, everyone should go to a designated shelter area, if available, or to the central portion of the mall; under no circumstances should individuals leave the shopping center to go to an automobile.
- In schools, there usually is a designated shelter area; everyone should stay out of auditoriums, gyms and other structures with wide free-span roofs.
- If caught in the open country, every effort should be made to move away from the tornado's path at right angles. If there is no time to escape, individuals should lie flat in the nearest ditch or ravine.

Any natural disaster, such as a thunderstorm or tornado, can cause destruction, but Navy commanders and other authorities can scientifically predict and plan for such occurrences. Navy personnel, and their dependents, should be aware of the local base plan for disasters.

Although not scientific, even the people of the British West Indies, in 1565, offer a simple and useful rule for determining when thunderstorms could be expected:

"June, too soon
July, stand by
August, don't trust
September, remember
October, all over." ⚓

the Science of Forecasting

STORY AND PHOTOS BY
PH1 TERRY MITCHELL

Sailors and farmers have something in common—the weather directly influences and affects their livelihood and safety.

The similarity ends there—a farmer has to stay put and take whatever weather nature dishes out; a sailor, if he's lucky, can sometimes outrun Mother Nature. Today's sailor also has an ace up his sleeve and that ace is the Fleet Weather Central.

Weatherman to the Atlantic Fleet, the Fleet Weather Central (FWC) in Norfolk, Va., constantly monitors the entire Atlantic Ocean and all that it encompasses. Its daily weather broadcasts and alerts keep Navy ships and stations abreast of changing weather patterns and conditions, aiding ships still further through its Optimum Track Ship Routing system. Object of such routing is to put a ship on the best course which will avoid storms and danger areas which may lie along the intended path to its destination.

After receiving a routing request from a ship or task force commander, staff meteorologists at FWC get together to analyze the existing weather and storm tracks. Once a "picture" of the weather and determination of the storm track movements are made, other parameters such as ship performance characteristics, forward and aft draft and an expected sailing date are taken into consideration.

From this and more, the initial route is planned and a clipboard record established for that task force or particular ship. The record is used continually to update the ship's route as the weather changes. If a change in course is needed for the ship to avoid bad weather, the recommended course is radioed from FWC directly to the ship.

Transmitting at speeds of over 14,000 words per minute, the Navy Environmental Data Networks and other computer-to-computer systems send and receive weather data from around the world. Without this effective communications system, environmental predictions or recommended

Opposite page: AGAN Ericson Broadbent releases a weather balloon equipped with a radiosonde; Above: Wave data received from FWC Monterey and operating ships of of the fleet is used to make up the daily wave height analysis chart; Left: AG3 Robin Conklin awaits the completion of a data run from one of the Navy's weather stations.

course changes, would be of little use to the fleet.

Using the numerical, meteorological and oceanographic information provided by the data systems department, command duty officers at FWC tailor it to fit the needs of individual ships and task units. Much of this data is distributed directly to the users via the fleet radio facsimile broadcast. The receiver of the facsimile broadcast on the ship prints out a map, which is much like the one that appears in your evening paper.

When required for special operations such as a towing mission or a large fleet exercise, a team of FWC aerographer's mates deploy onboard the operting ships using portable weather data equipment. These Mobile Environmental Teams (MET) collect, analyze, forecast and transmit on-scene environmental data.

Amphibious operations depend upon the surf conditions at the selected beachhead in order to land troops and equipment effectively. Aerographers on the MET analyze wave action, wind direction and force along with beach structure before making recommendations to the amphibious commander. At times the entire operation can and usually does hinge on what such team recommends.

During the F-14 *Tomcat* recovery operations off the coast of Scotland, for example, a MET went directly to the scene to analyze weather and make recommendations to the recovery commander.

When not on the scene, members of the teams visit the ships in port in order to train quartermasters and navigators in the proper use of weather instruments and the coding of weather observations.

Units operating along the eastern seaboard are provided with both area forecasts and warnings of destructive weather such as thunderstorms, hurricanes and gales. These warnings cover coastal and inland waterways from Maine south to the Virgin Islands.

During the hurricane season, FWC works closely in conjunction with the Air Force and the National Hurricane Center at Miami in monitoring tropical disturbances. Summaries are issued daily when a tropical storm is forecast or exists. Warnings are then issued to naval units and commands every three to six hours depending upon the storm's intensity.

FWC is not only concerned with the environment above the ocean's surface. FWC oceanographers report on undersea conditions as well—mostly in support of antisubmarine warfare forces. This requires analyses of extremely variable physical ocean characteristics as they apply to the prediction of sound propagation in the water—the primary means of submarine detection.

Observed sea conditions, the amount

Right: Making final electrical connections, ETN2 Gordon Grimm assembles a wind indicator; Below: AG2 Kristi Meddaugh reviews the previous day's weather and future forecasts.

of salt and impurities in the water, and the temperature of the water at different depths are analyzed and applied to sophisticated acoustic models at the Fleet Numerical Weather Center in Monterey, Calif. The models produce data from the same conditions as observed at sea, which is then used for both active and passive sound detection predictions. Using these predictions of the sound wave actions in the water, antisubmarine forces can make detection of submarines more reliable, perhaps easier.

Aviation weather, for both local and long range flights, is handled by the FWC office at NAS Norfolk's air terminal building. Using the range predictions, antisubmarine forces can determine which sound propagation paths to use and make detection of submarines more reliable. Each aircraft type and its flight characteristics have been pre-programmed into a central computer located at Offutt Air Force Base, Neb.

The duty Aerographer's Mate supplies the computer with plane type, takeoff weight and destination. Seconds later, the completed flight plan comes back on the computer's video display, detailed down to the specific course changes needed because of upper-air winds, basic direction changes and how much fuel the plane should use and carry to maintain a margin of extra fuel in case of a diversion from the regular course.

Even though FWC and other weather facilities are heavily computerized, the central ingredient in weather forecasting is highly trained people who make the system work, and insure its accuracy. The FWC team stands ready to assist the fleet in any way possible. A sailor's "weather eye" may provide a better forecast for tomorrow's weather than most. ⚓

Upper left: AG3 Kevin Hampton trains the FWC rooftop antenna to receive signals from a passing weather satellite; Left: LCDRs Nemcosky (left) and Giersch of the Optimum Track Ship Routing department discuss the latest weather effects on transiting ships; Below: the oiler USNS Taluga *(TAO 62) fights her way through heavy seas off the Republic of the Philippines while replenishing the attack aircraft carrier USS* Constellation *(CV 64).*

Sea/Shore Assignments for Women

The number of Navy enlisted women has increased steadily from about 5,000 in 1972 to nearly 19,000 today, and is expected to level out at around 30,000 in the 1980s. At the same time, the number of Navy jobs closed to women decreased to only 16 specialties out of 100—all 16 are primarily seagoing ratings.

These two situations and the statutes prohibiting women from serving on Navy ships (except hospital and transport ships) have given rise to a persistent misconception—especially among sailors in the fleet—that women are taking shore duty billets from seagoing men, thereby extending their sea duty tours. The truth is that Navy manpower managers have gone to great lengths to ensure that never happens. What follows is a summary of the steps taken to safeguard the interests of both men and women in the Navy.

Anticipating the influx of women into the sea service, the Navy's first step was a complete review of the number of billets available in each rating open to women according to duty types. There are six duty types:

- Type 1—Shore Duty CONUS
- Type 2—Sea Duty Afloat
- Type 3—Overseas Sea Duty Ashore
- Type 4—Overseas Sea Duty Afloat
- Type 5—Neutral Duty (usually in a tender)
- Type 6—Overseas Shore Duty

Within the limits of the law, women may be assigned to most of Types 1, 3 and 6 billets, but to only a few of Types 2, 4 and 5 billets. Based on the rating review study, maximum female strength levels/goals were set for each rating in the six types of duty just listed.

Additionally, a management system was devised to more effectively control the distribution of women among the ratings so that men's sea/shore rotation would be protected. All ratings were broken down into three groups with an assigned degree of ease or difficulty of entry for women in each. Rating Group I consists of ratings in which, because of limited numbers of billets, an influx of women would cause adverse effects on men's sea/shore rotation. All ratings in this group are closed to women.

Group II ratings include those which are currently at or in excess of prescribed manning levels. Entry by women into Group II ratings is "controlled."

Group III ratings are those in which personnel are most needed and the inclusion of women would not adversely affect men's sea/shore rotation. Commands may designate women strikers to any of these ratings if a billet at the command is available for them to fill. Some of these ratings require "A" School training and commands may request a school billet for women desiring to enter one of these jobs. A table showing current rating classifications is shown below.

Further, current female assignment policies have tended to equalize the burden of arduous duty among Navy men and women. While most women do not go to sea, consecutive tours abroad for women, often at isolated stations, are not uncommon. In fact, in two-thirds of the ratings open to women, such tours are the rule rather than the exception.

Although, with proper controls, women in the Navy have not adversely affected sea/shore rotation, manpower managers have had to face some problems along the way. One was the necessity of encouraging women to pursue mechanical and technical specialties, and thereby contain a possible flood of women in administrative ratings. This was accomplished through "A" School quotas and controlled entry lists.

A built-in problem also was found to exist in ratings such as HT, BM, QM and SM. Even though valid Type 3 (Overseas Sea Duty Ashore) billets existed in these ratings, it was found that women entering them were automatically denied certain types of on-the-job training available only while aboard ship. This severely limited opportunities to advance beyond the E-4/5 level for women in these ratings. For this reason as well as manning restrictions, strict entry controls have had to be initiated.

Providing equitable, varied and interesting assignments to all Navy personnel has always been a challenging task for Navy manpower managers and the unique statutory limitations on sea duty for women have imposed special problems. The Navy, however, has responded with policies that recognize and serve the individual interests of Navy men and women, whether at home, at sea or in a foreign land.

Current Rating Classifications

Group I

AW
CTI
EW
FTB
FTM
GMM
GMT (NEC 0891)
IM
ML
MT
OM
PI
PM
ST
STG
STS

Group II

AB
ABE
ABF
ABH
AE
AF
AM
AMS
AO
AQ
AT
AV
AX
AZ
BM
BT
BU
CE
CM
CU
DK
DS
EA
EM
EN
EO
EQ
ETR
FT
FTG
GM
GMG
GMT
HT
IC
IS
JO
LI
MM
MR
OS
PC
PH
PN
QM
SH
SK
SM
SW
TM
UT
YN

Group III

AC
AD
ADR
AG
AK
AME
AMH
AS
ASE
ASH
ASM
CTA
CTM
CTO
CTR
CTT
DM
DP
DT
ET
ETN
HM
LN
MA
MN
MS
MU
NC
OT
PR
RM
TD

(A complete listing of ratings requiring "A" school or equivalent, on-the-job training, and other prerequisites before entry can be found in BUPERSINST 1410.4A, Ch-1, Pers-5431, 31 January 1977.)

International Azalea Festival

STORY AND PHOTOS BY
PH1 TERRY MITCHELL

The week was a riot of colorful flowers, clowns and evening gowns. International Azalea Festival Week (April 18-24) in Norfolk draws out all the colors of the rainbow, paying tribute to the North Atlantic Treaty Organization (NATO), whose Supreme Allied Command, Atlantic, headquarters are located there.

As is the custom, the festival each year honors NATO by selecting a daughter of a foreign officer or official to reign as Queen Azalea. This year, Cecilie Countess Lambsdorff, daughter of Count and Countess Otto Lambsdorff, represented West Germany as Queen Azalea XXIV.

It all began, appropriately enough, in the NATO Amphitheatre at the Norfolk Botanical Gardens. Queen Azalea XIV, Admiral Isaac C. Kidd, Jr., SACLANT, and Norfolk city officials were in attendance as the 80-voice Festival of Praise Choir entertained with selected hymns.

Events during the week gathered speed once the festival got under way —golf tournaments and symphony music filled the better part of Monday; Tuesday saw the Queen and her court tour city hall and the General Douglas MacArthur Memorial.

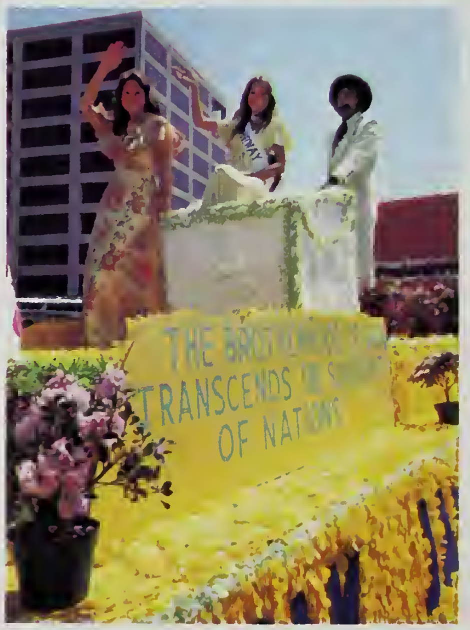
SACLANT's 25th Silver Anniversary was celebrated at mid-week with a ceremony complete with ruffles and flourishes and a saluting battery. Later, members of SACLANT gathered to talk to Queen Azalea and to welcome her to their command and to the city.

The Portsmouth Naval Hospital tour the following day was one of tenderness as Queen Azalea went from bed to bed in the children's ward greeting small patients, giving out dolls and wishing speedy recoveries. Patients from other wards gathered in the passageways to get a better look as the

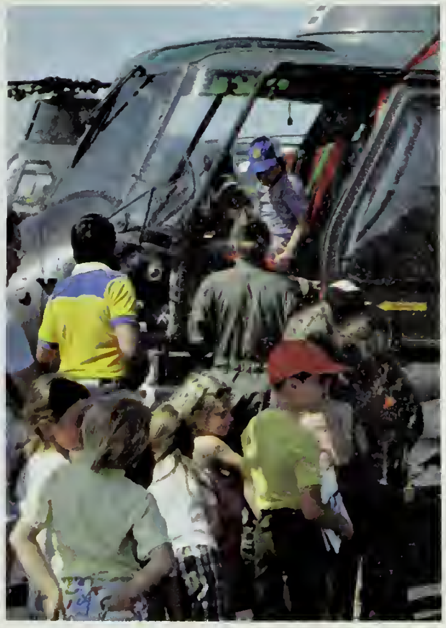
(Continued on page 44)

A grand parade of floats, bands and marching units started early Saturday morning.

QUEEN


THE BROTHERHOOD
TRANSCENDS
OF NATIONS

USN



Queen wished servicemen at the hospital the best of luck. One sailor, previously stationed in Germany, greeted her in German, much to her surprise.

The Queen's command performance on Friday night was highlighted by Canadian folk singer Gordon Lightfoot. Afterwards, the Queen, the NATO princesses and their Naval Academy Midshipmen escorts, became light-of-foot as a local square dancing club taught the court the rudiments of square dancing.

A grand parade of floats, bands and marching units started early Saturday morning. While the city residents enjoyed the parade, the Norfolk Naval Station was host to a rugby tournament entered in by eastern seaboard teams. Another contest, one involving sail, wind and man was in progress as each class boat skipper vied for the SACLANT Perpetual Trophy.

Sunday's main event shifted the spotlight to the Norfolk Naval Air Station, as a torrent of visitors came to watch the air show and exhibits. An estimated 200,000 people poured into the base, faces turned skyward to watch the Navy's parachute demonstration team, the Chuting Stars, literally jump into their work. Next came a demonstration of aircraft, from prop to jet, executing aerial maneuvers to the "ohs" and "ahs" of the crowd. The stage was then set for the Blue Angels' brand of fast, close and exhilarating precision flying.

A crowd of that size, combined with the hot afternoon sun, resulted in over 16,000 cans of soda and 10,000 hotdogs being consumed.

The airshow over, the crowd made their way back to their cars with many a sunburnt nose and back, in evidence. The week of festivities and international excitement was over for the Tidewater area and another color was added to the rainbow—sunburn pink.

MCPON

BY MCPON ROBERT J. WALKER

Selection Board Proceedings

As Master Chief Petty Officer of the Navy, I am constantly in touch with the topics of current and prevailing interest within the enlisted community through my daily correspondence and frequent official travel. A perennial topic of concern has been voiced by many senior petty officers—how does the selection board work?

The puzzlement is understandable since the selection board system of advancement is more complex than the outmoded advancement-by-examination system. To help make the proceedings more lucid, let's consider some of the more important aspects of the selection board process.

Each board consists of a captain who serves as president of the board, a junior officer who serves as recorder of the board and both officer and master chief petty officer personnel serving as board members. The board is divided into panels which consist of at least one officer and one master chief petty officer. Each panel reviews the records of individuals in one general professional area.

The board members are given quotas specifying the maximum number that can be selected from each rating. While board members cannot exceed that number, it is possible for them to recommend a lesser number for selection if they feel that there are not enough fully qualified candidates available. Incidentally, the quotas are developed within the Bureau of Naval Personnel and are the amount necessary to replace normal losses, meet the needs of the service by rating, and maximize advancement opportunities.

Upon convening, the board goes into "closed session." This lasts for approximately two days during which ground rules and selection criteria are discussed, formulated and adopted. These ground rules and selection criteria are unique to each board since each board is given the freedom to establish rules and procedures necessary to discharge its duties.

Careful examination of records is then conducted so that an accurate overall evaluation of each candidate can be established. To arrive at such an evaluation, the board members consider many factors:

Performance evaluations: Evaluations are the most tangible indicators to use in determining a candidate's qualification for advancement since they reflect the actual demonstrated performance of the individual. Evaluations, by themselves, are not sufficient to ensure selection; however, most of the selected candidates possess evaluations that show a high level of performance in all areas.

Duties: The history of duties performed, at sea or ashore, and assignments within a duty station can be determined from the service record. Also, board members can tell whether or not the individual was performing duties commensurate with his or her rate, the degree of responsibility held and the opportunity to exercise leadership.

Another indicator of the individual's abilities can be further determined on the basis of the operating schedule of the command served in. Heavy operating schedules test the abilities of individuals far more than relaxed schedules.

Other factors: Exam scores are available if the board members desire to consider the individual's relative performance.

Personal decorations, letters of commendation or appreciation and other positive or complimentary correspondence may be given special consideration.

Those who have volunteered for or are serving in special duty assignments may be given additional consideration. Examples are: instructor and recruiting duty, corrective center counselors, drug abuse and alcohol rehabilitation staff members, MAAG/Mission/Attache duty and Personnel Exchange Program participants.

Those who achieve academic credentials beyond high school level, through ADCOP or independently, may be given additional consideration.

Individuals who have had disciplinary problems or have received letters of indebtedness or have other record entries relevant to behavioral difficulties such as alcoholism, drug abuse, obesity or demonstrated racial, sexual or religious discrimination will find the path to E-7/8/9 more difficult than those with clear records. However, if the above mentioned problem areas are overcome, the single most important factor influencing selection is still sustained superior performance of duty.

To promote better understanding of the selection board process by the enlisted community, I recommended that two Master Chief Petty Officers of the Fleet or Force be assigned to each E-7 and E-8/9 selection board so that they would be able to explain the functions of the board from their direct experience.

This has been accomplished, and the first two MCPOF's were assigned to the E-8/9 selection board that convened in March. ⚓

Mail Buoy

Single BAQ

Sir: Regarding the letter of TD3 Love in the December 1976 issue: (See Mail Buoy, All Hands, Dec. 76) I'm curious how her husband is stationed aboard a ship and at any time is drawing single BAQ? My husband has been stationed aboard ship for about two years and has never gotten one penny of single BAQ in or out of port. If TD3 Love will let me in on the secret, I'd love to get some back money from the Navy.—ETN2 B.L.V.

- *TD3 Love was incorrect in her statement that her husband who is on a ship receives single BAQ but loses it when he is at sea for more than 30 days. The* All Hands *answer included the statement that TD3 Love's husband does not receive BAQ while at sea since he is treated as a member without dependents. Neither TD3 Love's husband nor your husband, if on a ship, is entitled to single BAQ.*—Ed.

Debt and Credit

Sir: The timely coverage on debt and credit in the March issue was right on the money! (See "The High Cost of Debt and Credit," March 1977 All Hands).

Another aspect of chronic indebtedness often overlooked is that it can dry up sources of lower cost credit. Credit Unions, which offer some of the lowest interest rates available, provide a good example. Some of the more than 80 credit unions serving Navy and Marine Corps personnel have policies which prohibit loans to enlisted personnel of the lower grades because, as a group, they have proved to be poor credit risks. Many other credit unions place severe restrictions on loans to members of this group.

Still others, such as Navy Federal Credit Union, which make a deliberate and conscientious effort to serve the credit needs of personnel in *all* pay grades, find themselves under strong pressure from the good credit risks among their members to establish more restrictive loan policies. To understand why, consider that, in 1976, NFCU had to charge off $2.3 million worth of uncollectible loans. Half of NFCU's 1976 loan losses represented loans to enlisted personnel, and over 60 per cent of these were loans to those in the lower three pay grades.

As Chairman of NFCU's Credit Committee, these statistics distress me greatly. I am even more distressed that many young people who create these statistics fail to realize that a bad credit rating, much like a less-than-honorable discharge, can follow them all of their lives —in or out of the Navy! The solution appears to lie in more frequent and effective counseling of junior personnel by their leaders: senior petty officers, CPOs, division officers, right on up to commanding officers—more articles such as the one in the March issue of All Hands and better listening on the part of those to whom these efforts are directed!—Leonard J. Simon, NFCU Credit Committee Chairman.

Time in Rate/Service

Sir: I was advanced to E-5 in November '74 off the August '74 test (before the time in service requirements were modified). I have to wait until '78 before taking the E-6 test. This will give me four years as an E-5.

Many of our "push-button" third class that have made second class will be eligible for the test because of the gift of third class. There are sailors that are two years junior to me that can take the first class test while I sit back and watch them go. The September terminal eligibility date vice May further makes them "eligible" for advancement tests.

To quote one writer to All Hands, "This simply is not fair." One day I can be LPO, and the next (not due to my own failures) I can be low man on the totem pole. Not only am I not being allowed to compete with many of the people that I took the second class test with, but am being held back from advancement over "junior" personnel. Is it too much to ask the higher ups to take the trouble to straighten out this mess?—YN2 W. J.

- *Your question has become a most common one since the incorporation of advancement constructive time into the advancement system. The Department of Defense has established within all services a uniform, minimum time-in-service requirement which members must satisfy before being eligible for advancement to all grades above paygrade E-3.*

For members entering the Navy in advanced grades or through special programs affording early, accelerated advancements, these requirements would necessitate an unusually long delay before eligibility requirements for advancements to pay grades above E-3 could be met. Therefore, a "constructive time" factor has been devised to permit these members to compete on an equitable basis with their contemporaries who were advanced through the apprenticeship grades. Each individual will be considered to have acquired the combined minimum time (for advancement purposes only) currently required between grades.

For example, a member entering the Navy in pay grade E-5, or being advanced to that grade through accelerated advancement, will be credited with 36 months' time-in-service reflecting the minimum combined time a member is required to serve in pay grades E-1 through E-4.

In view of the foregoing, the "push-button" advancee is placed in a contemporary status with other members who are advanced during the same cycle. This is done to preclude negating the incentive of accelerated advancement, which, incidentally, requires the accelerated advancee to incur a specified service obligation which is not necessary for the "regular" advancee. All advance under the same regulations and time requirements after the accelerated advancement.—Ed.

Navigation Aid

Sir: Regarding your story about TANCAV in the April issue (See "They Built Their Own," April, 1977 All Hands), Richard Plumb and Richard Elmore might be interested in researching and using some of the concepts of the old WW II Virtual Plan Position Indicator Reflectoscope (VPR), to help them perfect their invention. The VPR was used as a navigation instrument by the Amphibious Forces. It consisted of a device placed over the PPI scope of the radar. It utilized a partial-reflecting mirror which superimposed the radar image over the chart. The ship's position could then be seen, and plotted, on the chart at the center point of the PPI sweep image. The Amphibious Forces trained radarmen in the use of the VPR at NAVPHIBSCOL, Coronado, Calif., through 1948.—A.F. Marugg

• *We took the liberty of forwarding a copy of your letter to the fellows who "built their own" many years after someone else apparently had a similar idea. It appears the "old-timers" may still have a thing or two we can teach these youngsters.*—Ed.

Reunions

• *VQ 1/VQ 2*—Reunion July 31 in Washington, D. C. Contact Dale Hagen, 5304 Redd Lane, Temple Hills, Md. 20031.

• USS *James E. Craig* (DE 201)—Reunion August 6-7 in Joliet, Ill. Contact Wendell O. Easton, 401 West Bevan Drive, Joliet, Ill. 60435.

• USS *Topeka* (CL 67) (1944-1949)—Fifth reunion on August 19-21 in Long Beach, Calif. Contact James W. Wilson, 618 Abbott St., Muncie, Ind. 47303.

• USS *Saratoga* (CV 3)—26th annual reunion August 19-20 in Seattle, Wash. Contact Jack Frost, 2659 Belvidere S.W., Seattle, Wash., 98126.

• USS *Amycus* (ARL 2)—Reunion September 3-5 in Chicago. Contact Doug Stahle, 3 Kane Court, Clarendon Hills, Ill. 60514.

• USS *Somers* (DD 381)—Reunion at Norfolk, Va., September 9-11. Contact Lewis Bowden, Jr., 6110 Tidewater Dr., Norfolk, Va. 23509.

• USS *Miami* (CL 89)—Reunion September 16-18 in Lancaster, Pa. Contact S. C. Richardson, 5507 Limerick Circle, Apt. 46, Wilmington, Del. 19808.

• USS *Tringa* (ASR 16)—Decommissioning and reunion September 30 at SUBASE New London, Conn. Contact Paul C. Cottrell, 5992 Linden Ave., Long Beach, Calif. 90805.

The Log Book

Here are some more excerpts from ALL HANDS articles of days gone by:

35 Years Ago

• Created to relieve male personnel for duty at sea, the Women's Reserve of the U.S. Naval Reserve has been launched, rigged, and commissioned with the first real feminine officers in the Navy's history. (Members of the Navy Nurse Corps hold rank corresponding to that of officers under legislation signed recently by the President, but do not have full officer status.)

Enlisted ratings will be given women in such fields as radio, communications, telephone operating, teletyping, general stenographic and clerical work, accounting, mechanics, and home economics, and later in other fields as the requirements of the naval service require.

25 Years Ago

• Here is a round-up covering service pay and allowances under the new Armed Services Pay Raise Act of May 1952:

Rate or Rank	Years Service	Basic Pay
E-1	under 2	$ 83.20
E-2	under 2	$ 85.80
E-3	under 2	$ 99.37
E-4	over 2	$129.95
E-5	over 4	$160.52
E-6	over 6	$191.10
E-7	over 10	$236.96
W-1	over 14	$257.24
W-2	over 16	$302.64
W-3	over 18	$363.17
W-4	over 22	$453.96
O-1	under 2	$222.30
O-2	over 2	$274.18
O-3	over 4	$340.86
O-4	over 10	$429.78
O-5	over 14	$503.88
O-6	over 18	$637.26
O-7	over 22	$800.28
O-8 (and above)	over 26	$963.30

15 Years Ago

• Visitors to Pearl Harbor are being treated to a brand new and impressive sight these days. Smack dab in the middle of Battleship Row, and suspended athwartships over the sunken USS *Arizona* (BB 39), is the gleaming white concrete and marble USS *Arizona* Memorial—a monument from a grateful nation to nearly 1,200 of her most honored dead, and the culmination of a 20-year dream.

WHEN A GOOD SAILOR LEAVES, THE NAVY LOSES.

If you're a leader, you know what good sailors mean. They make the difference between a smooth-running team and a headache. So do yourself and the Navy a service.

Don't wait until shipover time to counsel the first termer. Remember, you're a key part of the retention team, because of your experience and the respect you've earned on the job.

Remind your shipmates throughout their enlistments about their Navy benefits. Not just the obvious ones, like medical care, housing, and 30 days' annual paid vacation. But of the opportunities for training, education, and advancement.

Remind them that in their next hitch, there's a good chance of advancement in their present job. With more responsibility. More leadership opportunities. Maybe even a reenlistment bonus.

And if they're in overcrowded ratings, it could be their chance to qualify for a new rating. This could mean a brand-new job. With special training. At a guaranteed new duty station.

Keeping the good sailors in and directing them where they're needed is a part of every officer's, CPO's and petty officer's job.

So when you see shipmates looking for reasons to stay in, don't give them any sea stories. Give them the facts. But if you don't have all the answers, direct them to someone who does. Their divisional CPO, divisional counselor, or Command Career Counselor.

Remember, we can't afford to let any of the good ones get away.

NAVY

IF YOU'RE GOOD, IT PAYS TO STAY IN.

Stern Shots

Match these famous battles with their respective wars:

1. _____ New Providence Amphibious Operation	A. Revolutionary War
2. _____ Chosin Reservoir	B. Korean War
3. _____ Manila Bay	C. Spanish-American War
4. _____ Tripoli	D. French Revolution
5. _____ Norfolk Navy Yard (see below)	E. Mexican War
6. _____ Tuxpan River Assault	F. Barbary Wars
7. _____ Battle off Flamborough Head	G. Civil War
8. _____ Battle of Cape St. George	H. War of 1812
9. _____ Battle of Kiska	I. World War I
10. _____ Battle of Santa Cruz Island	J. World War II
11. _____ Battle of Valcour Island	
12. _____ Battle of Scapa Flow	
13. _____ Attack on Durazzo	
14. _____ Battle of Dardanelles	
15. _____ Battle of Port Royal	
16. _____ Battle of Lake Erie	
17. _____ Battle of Leyte Gulf	
18. _____ Seizure of Tobasco	
19. _____ The Marianas Turkey Shoot	
20. _____ Red River Expedition	

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Answers: 1A, 2B, 3C, 4F, 5G, 6E, 7A, 8J, 9J, 10J, 11A, 12 I, 13 I, 14 I, 15G, 16H, 17J, 18E, 19J, 20G.

Norfolk Azalea Festival

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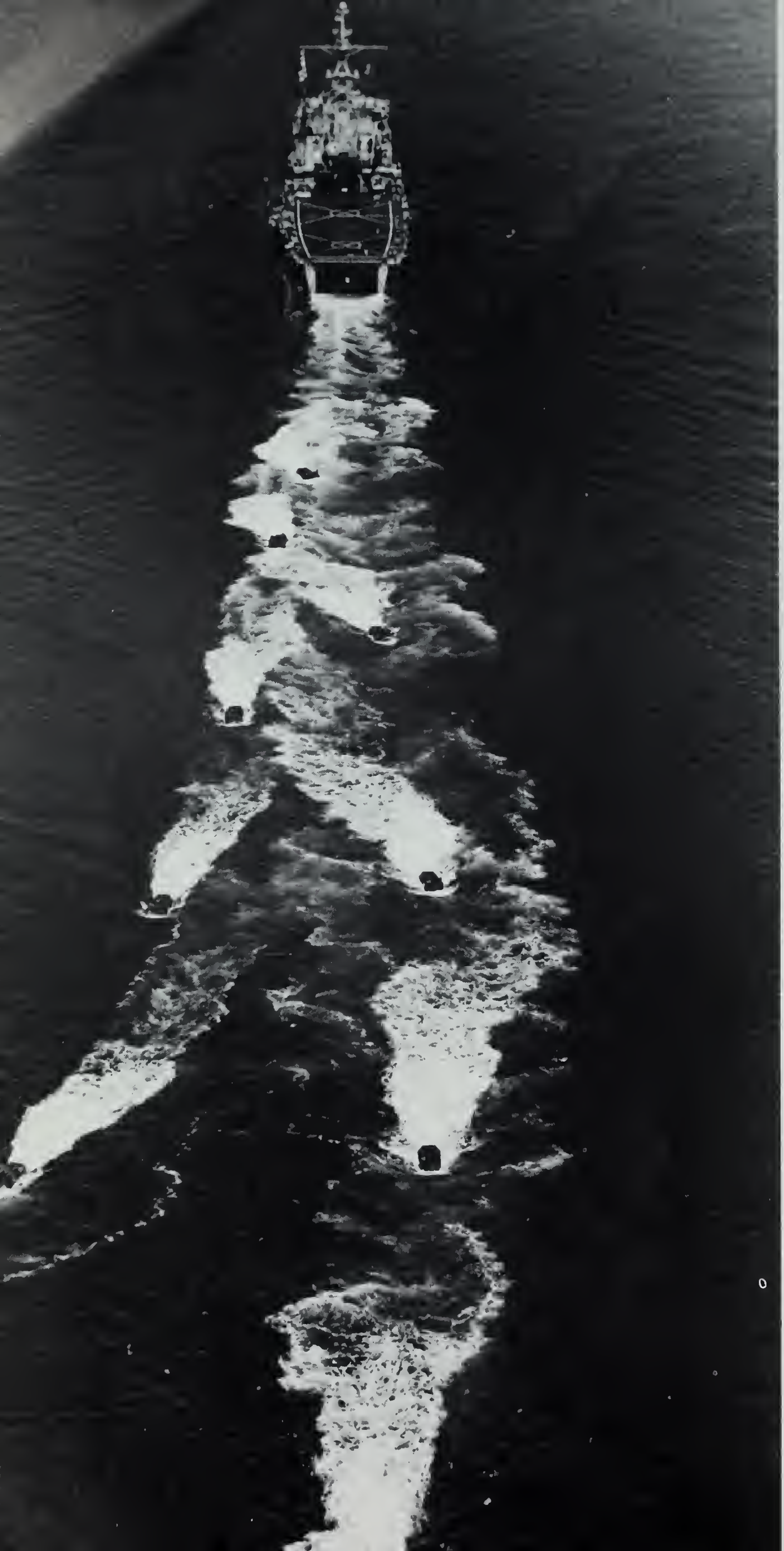
AUGUST 1977



IN A HURRY—Landing craft pour from the amphibious transport dock USS Coronado *(LPD 11) during a mock assault on a North Carolina beach this past spring. (Photo by PHC Milt Putnam)*

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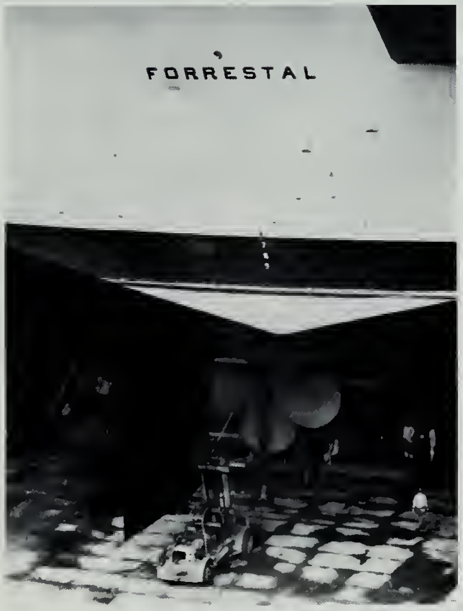

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ALL HANDS

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AUGUST 1977 NUMBER 727

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Currents

Navy Establishes New AEGIS Shipbuilding System ● Work to strengthen the design, acquisition, fleet-introduction and life-support programs of the Navy's new AEGIS destroyer and cruiser classes has resulted in the formation of a new, unified AEGIS shipbuilding project. AEGIS is an automated shipboard weapon system that features fast reaction, high firepower/availability and electronic countermeasures immunity to counter antiair warfare threats. The new project will consolidate the building of AEGIS-equipped ships under a single manager. This system-engineering approach will better meet the Navy's objectives, which include delivery of AEGIS ships to the fleet within cost, on schedule, and with specified performance. Rear Admiral Wayne E. Meyer has assumed the management of the AEGIS Project. RADM Meyer has more than 10 years of experience in the management of complex weapons systems projects including the design of AEGIS systems and ships. AEGIS will provide the nucleus of advanced surface warship combat systems effectively to counter increasing, sophisticated threats to the fleet. The specific goal is AEGIS installation in destroyer and nuclear cruiser classes of ships.

Submerged Tomahawk Missile Launched ● The Navy recently conducted the first test of a submerged launch through boosted flight with a transition to cruise engine-powered flight of a *Tomahawk* Cruise Missile. Although the missile completed the transition, one of its four tailfins failed to deploy causing the missile to become unstable and fall into the ocean. The cause of the manfunction was identified and is being corrected.

Double Credit For La Salle Duty ● Double sea duty credit is now given to personnel serving aboard USS *La Salle* (AGF 3), command ship of the U.S. Middle East Force, effective May 31, 1977. BuPers announced that the new credit recognizes the unique nature of duty in *La Salle,* which requires 12-month unaccompanied tours in the Indian Ocean. Personnel desiring to take advantage of this double sea-duty credit should request assignment to *La Salle*, in accordance with BuPersNote 1300 of May 25, 1977.

DoD Withholding State Income Taxes ● The Department of Defense began withholding state taxes from military paychecks from the following states on July 1, 1977: Alabama, Iowa, New Mexico, Pennsylvania, Virginia, Delaware, Kansas, New York, South Carolina, Idaho, New Jersey, North Carolina and Utah. Military income of residents of Idaho and Pennsylvania will be withheld only while members are stationed in those states. New Jersey and New York laws currently provide specific criteria to determine whether service members will be considered residents of those states for tax purposes. Additionally, DoD began withholding taxes for the following jurisdictions on Aug. 1, 1977: Colorado, Wisconsin, Maryland, Indiana, Massachusetts, District of Columbia and Rhode Island. The following states are expected to join the withholding program in November: Hawaii, Nebraska, Kentucky, Oregon and Louisiana. There are no plans at this time to begin the withholding of taxes for those states not listed. Service members should consult legal assistance officers for the details of state tax laws which would affect withholding status.

Eisenhower To Be Homeported In Norfolk ● The Navy recently announced that *Dwight D. Eisenhower* (CVN 69) will be homeported in Norfolk, Va., following her commissioning this fall. The nuclear-powered *Nimitz* class carrier is fitting out at Newport News. Va.

Limits Set To Garnishment Of Government Pay ● No more than 65 per cent of the disposable income of military personnel and government employees may be garnisheed (involuntarily deducted) for child support and alimony payments, according to a new pay guideline. The new rule is a provision included in the Tax Reduction and Simplification Act of 1977, recently passed by Congress. Section 659 of Title 42 of the U.S. Code, passed in 1975, authorized garnishment of government salaries for the first time. No limits were set, however, and some personnel were being garnisheed up to 100 % of their pay to cover overdue alimony and child support payments.

Overseas Swap Program Reinstituted ● Navy people assigned overseas are again eligible for the Exchange of Duty (SWAP) program. In January, Change 19 to the Enlisted Transfer Manual (TRANSMAN) deleted overseas areas from this program in an effort to increase stability at overseas commands. Effective immediately, however, personnel serving on Type Duty 1 and 6 are eligible for exchange of duty with personnel serving on similar duty consistent with Sea/Shore and OUTUS/CONUS rotation. Personnel serving on Type Duty 2, 3, 4 or 5 are eligible for exchange only with those serving on either Type Duty 2, 3, 4 or 5. Eligibility criteria for the Exchange of Duty program contained in TRANSMAN, Chapter 16, as modified above, remains effective. Change 20 to the *Enlisted Transfer Manual* will incorporate this revision into the Exchange of Duty program and will be distributed this fall.

Exchanges Contribute $37 Million To Navy Recreation ● Navy Exchanges worldwide contributed $37,230,000 to the Navy Recreation Program during Fiscal Year 1976, according to a recent report by the Navy Resale System Office (NAVRESO). In addition, the Yokosuka Navy Exchange Mail Order Program, with sales of $13,200,000, distributed $360,000 to ship and station recreation funds at those activities where personnel made purchases from the mail order catalog during the year. Total Navy Exchange sales for Fiscal Year 1976 were $1,051,098,000. NAVRESO is projecting sales of $1, 075,600,000 for Fiscal Year 1977.

Naval Petroleum Reserve Transferred To Interior Department ● The Navy recently transferred Naval Petroleum Reserve Four in Alaska to the Department of the Interior, in accordance with the Naval Petroleum Reserves Production Act of April 5, 1976. Naval Petroleum Reserve Four, which covers 37,000 square miles, was created on Feb. 27, 1923, by President Warren G. Harding. The site now will be known as the National Petroleum Reserve in Alaska (NPRA).

BIRDS FREE!

GRAND SLAM!

At the O.H. Perry Class Test Center the job goes on around the clock.

Sixty minutes into a tight one, the *Silver Fox's* LAMPS helo reports bingo state. It has confirmed the sonar contact reported 165°, 30 miles from the task group as an enemy submarine, but is now being vectored to homeplate.

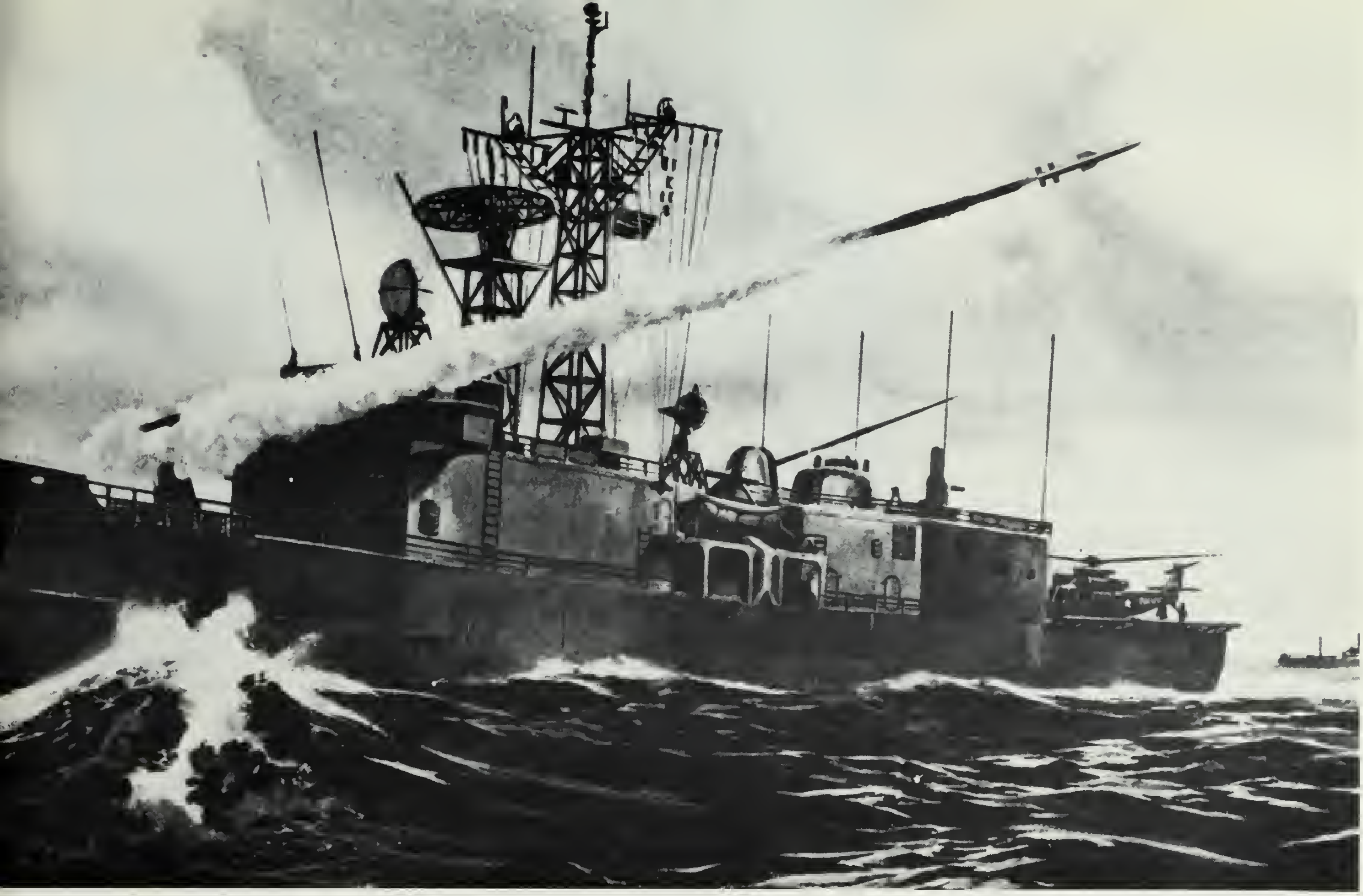
What's that? Off to the west, a wake—a high speed boat approaching. In CIC the radio crackles. "Giant, this is Lamplighter One. Visual contact. *Komar.* Range 12000, bearing 290°, closing you—fast. Over." *

This is what the CO has been waiting for. In less than a minute, *Silver Fox* has sent a *Harpoon* missile greeting toward the unsuspecting *Komar*. But wait. . . .

Two *Styx* missiles inbound! CIC sees them on radar just as the helo reports same by radio. "Birds free!" Before the report makes it to OTC, four *Standard* missiles are in the air to intercept. . . . "Grand slam!"

So far so good. *Silver Fox* has held her own and the *Komar* is in flames. Now to set flight quarters, recover the

* (Terminology used in trainers may not reflect actual fleet usage.)



helo, refuel, rearm and send it back out.

For twenty minutes everything goes smoothly. Over the 1MC, "All hands stand clear while engaging rotors."

Suddenly the gates of Hades open wide, real wide—the sub, at 235° and 12 miles away, launches a *SS-N-7* missile. Ten seconds later she gets off another, and a third, and a fourth. . . . What now???

Shut down the equipment and head for beautiful downtown Ronkonkoma.

It was, after all, only a dry run; you were making use of the sophisticated computers, weapons consoles and radar equipment housed at the Oliver Hazard Perry (FFG-7) Class Combat System Test Center in Ronkonkoma, N. Y. You weren't in the Mediterranean or the North Atlantic, nor were you really aboard a guided missile frigate as part of a protective screen for a convoy or replenishment group.

Still, merely throwing a series of switches and turning up the room lights hardly transforms you—not instantly at least—to your dry land surroundings. Your mind is still aboard a ship reaching for deep water and trying to dodge incoming missiles. The mood is sobering—it's all a game; but is it really?

The test center has been in operation since 1974, across the road from Islip's MacArthur Airport on Long Island. It's housed in a rambling one-story aluminum-sided building put up by Sperry Division of Sperry Rand Corp.; a small, unobtrusive sign tells passersby that it's the Sperry Systems Test Center.

Nothing hints that the structure has anything to do with a ship under construction at Bath, Maine. The radars on the north side of the structure are imposing to say the least. They provide the only hint that something different goes on inside the building. Security is tight, yet it has a disarming profile. Nothing garish here.

Inside, two engineering duty officers—Lieutenant Commander Hank Feeser and Lieutenant Fred Wyse—head up a group of 21 Navy enlisted people, including two women. They answer operationally to the Naval Sea Systems Command (PMS 399—Guided Missile Frigate Ship Acquisition Project Office) in Washington and administratively to the Naval Plant Representative Office in Great Neck, N. Y.

Actually, the Perry Class Test Center plays an advocate role in behalf of fleet sailors—particularly those who will man the combat system of the new O. H. Perry Class Guided Missile Frigates, approximately 60 ships in all, including several which will be built for the Australian Navy.

Originally, the role of the center's Navy personnel was to be the combat system demonstration crew for the Commander, Operational Test and Evaluation Force (COMOPTEVFOR) during the initial operational test and evaluation.

Subsequently, the Ronkonkoma group, drawing on its thorough familiarity with the *Perry* combat system, and considerable operational experience of its members, has assumed two broad engineering development missions:

- First—test out the system. Find out what can go wrong with it at sea; find out what is inconvenient to oper-

LTJG Bill Bruen acting as the ASW Evaluator, with LTJG Sid DuMont as the assistant ASW Evaluator. LTJG Bruen is the prospective Ordnance Officer and LTJG DuMont is the prospective ASW Officer of FFG 7.

ate, hard to maintain, and inadequately supported by manuals and spare parts. Then, propose and push through corrections.

- Second—train the combat information, weapons and data systems personnel who will man the *Perry* in the operation and maintenance of the combat system. Train them before they report for duty.

As new systems are added—LAMPS III, TACTAS, ASMD EW, LINK II and CIWS—to the *Perry* and following ships of the class, they will be installed at the Combat System Test Center first to prove the changes will work. The job includes verifying blueprints, cabling, computer programs, combat system doctrine and the like.

With this kind of work scheduled for the future, the Perry Class Test Center should be operational until at least 1985.

For the present, the job is complex and demanding. The Navy men and women attached to the center (OSs, DSs, FTs, ETs—and a lone PN) have learned to disregard the term "working hours."

"We haven't had the luxury of such a thing as normal working hours since I've been here," said LCDR Feeser. The job goes on around the clock with Sperry engineers and programmers filling the day. Working far into the night—any night, and on weekends—or reporting aboard at 0300 is standard operating procedure for the Navy. The test center also finds itself restructuring its schedule to accommodate other commands and priorities.

LCDR Feeser offers an example. "We had an A-4 squadron ready to provide aircraft services next week for a scheduled air attack exercise. Now I get word they have an urgent operational commitment and we have to rely instead on a Reserve outfit from Minnesota. They operate only on weekends. That means we'll be here all Saturday and Sunday."

But once the discussion shifts to the business at hand, complaints about long hours disappear. Everyone at the test center fairly lives and breathes his work—the group has been "underway" many hundreds of hours.

Aside from the usual array of offices, drafting spaces and a computer room, the test center is built around mock-ups containing the equipment being fitted into the *Perry* and following ships of that class.

Built exactly to size (of plywood but including steel decks covered with rubber matting), authentically painted, and housing the actual gear, are the following areas:

- Combat Information Center (CIC)
- CIC Equipment Room
- Fire Control Equipment Rooms (containing the MK 92 Mod 2 Fire Control System)

Entering any of the above is like entering the actual spaces aboard ship. One is physically, mentally and emotionally transported to the real-life shipboard scene, complete with accompanying sounds and subdued combat lighting. Although the computers compensate for the roll and pitch movement of a ship upon the sea, such physical movement is the only missing factor in the Long Island site. Sound powered circuits, radio amplifiers and other communications noise are realistically present—all coming from the Operations Control Center to duplicate real-world inputs to CIC; even to setting flight quarters for helo ops and sea detail for entering harbor.

The test center has a combat system doctrine, ship's instructions, tactical pubs, and op orders for USS *Silver Fox* (FFG-6.5)—the name given the mock-up. All is geared to make operations as realistic as possible.

In CIC, the array of consoles that comprise the combat system vie for attention with an unlikely competitor—a chair. From its location, which commands a view of all activity in CIC, one can easily conclude that this chair is intended for the commanding officer.

The CO cannot afford to be on the

"...one submarine skipper ran them ragged in CIC..."

bridge. When split seconds count in missile warfare, he has to see and hear things as they happen—even before they happen. The tactical action officer—assisted by the weapons control officer—has charge of the room, the equipment and the people in it; the skipper, though, can override a decision almost instantaneously. With the radar scopes constantly in view, he sees things much better than if he were on the bridge.

Some traditional aspects of CIC remain. The architects have included some plexiglas status boards on the bulkhead opposite the captain's chair. "Actually, the information recorded on those boards isn't very helpful," says LT Wyse. "By the time it can be posted, it's already old. It's possible to get a missile off from a cold start a matter of seconds after target detection. It usually takes longer for the TAO to get the okay to shoot. With this kind of speed, we must rely on the computers for information display and record keeping."

The action is fast paced. The FFG-7 combat system is built around the MK 92 Mod 2, an Americanized version of a Dutch fire control system. It provides up-to-the-second target track files, establishes threat priority and engagement schedules, designates fire control channels, and coordinates loading and assignment of weapons—*Standard* and *Harpoon* missiles, and a MK 75/76 mm OTO MELARA gun. While doing this, the entire tactical picture is displayed for the CO and TAO.

As far as CIC is concerned, the whole outside world exists in the Operations Control Center (OCC). In it is a console full of simulators—launcher, gun, sonar, and so forth—and a team headed by ETC Mike Link and OSC John Booth who control the progress of the battle problem. The officer of the deck and lookouts are in OCC to drive the *Silver Fox* and be the eyes of CIC. So is the officer in tactical command and his task group with all the force radio circuits—PRITAC, PRICI, et cetera. EW and sonar control is there too, as well as the LAMPS pilot with his detachment of helos. And of course, OCC is where the enemy commander holds court!

Everything that goes on in CIC can be monitored from the control center. There are automatic indicators of equipment status and displays of the tactical picture. Four infrared TV cameras, strategically placed in CIC, can be controlled from OCC—to watch over the ASW evaluator's shoulder without getting in his way, for instance, or to zoom in on dials and computer readout screens to see what's going on.

The CIC team knows they are being watched very closely, almost like Big Brother is there! But this is quite practical. The purpose of the test center is to design the combat system of the *Perry* class frigates so that it works—all the time and as efficiently as possible. From OCC it is possible to see what operator action, or sequence of them, causes trouble. The Navy and Sperry engineers work together to correct the problems as they are found, many times effecting fixes before the next day's operations.

To date, the *Silver Fox* has "fired" more than 60,000 missiles and shot almost as many rounds from the gun. They don't all hit their targets either. The simulation computer "rolls a die" each shot—sometimes giving a kill, sometimes a survive. *Silver Fox* has been "sunk" quite a few times as a result.

But there are advantages to simulation. This type of testing could not possibly be done live aboard ship.

Occasionally the OCC team has a "visiting expert" drop in for a chat. One submarine skipper spent a few

Former Test Center member and now FFG 7 crewmember, Gun Fire Control Technician 1st Class Jim Ferguson operates the Weapons Control Console (WCC #2).

days in the control center and ran them ragged in CIC, penetrating the screen time and time again. Before he left, test center personnel had a better understanding of submariners and their weapons system. A helo pilot also was able to add another chapter to the book of tricks—he'll be back, too.

Many problems have been uncovered during the past year or so, but the net result has been improvement of the system.

Shipbuilders from Bath, Maine, for instance, came down and had a look at the fire control room. They were aghast when they saw the layout—too many sharp corners, too much boxing in of certain gear. They couldn't build it that way. Sperry went to the drafting table and after days of drilling with chalk, tape and pen, dropped the existing 13 corners to six with a blend thrown in for good measure.

The test center is proving its worth by helping planners to zero in on problems before the system is installed aboard ship.

As the outside of the building is deceiving in appearance, the inside also seems to be anything but what it is—its calm, unhurried atmosphere belies the vital, all-important mission. Everything looks calm but there is a certain urgency in the air and there's a need to race the clock: *Perry* goes into commission this winter.

The combat system—its consoles, scopes and weapons systems—will be aboard and in perfect working order. The crew will be trained and efficient. It didn't happen overnight. ⚓

Cast adrift from the regular Navy

It's a good thing the job presents challenges—otherwise the area could get them down. The 23 souls attached to the Oliver Hazard Perry Class Combat System Test Center at Ronkonkoma (L. I.), N. Y. are, in a sense, cast adrift from the regular Navy. Duty in New York these days—even in the middle of Long Island—presents certain difficulties.

Consider the following:

- Rentals are out of sight, perhaps among the highest in cost in the nation.
- Those who own their homes pay unbelieveably high property taxes. One stated, "Twenty per cent of my total income goes to pay these taxes."
- The area has an 8 per cent sales tax, but moving to the city is out of the question—there they have a commuter tax as well.
- Travel on the Long Island Expressway "barrels" along at 15 mph during what has to be the world's longest "rush" hour; the expressway vies with the Brooklyn-Queens Expressway for the title "World's Largest Parking Lot."
- Mitchel Field, an old Air Force Base, and a small Coast Guard Station, both about 35 miles away, supply the only available government housing, and this is only for married personnel. Long waiting lists are the norm.

In a way, it's a relief to start an occasional work day at 2400 or 0300; driving along the quiet, almost deserted expressway seems to make up for the missing sleep.

Lieutenant Commander Feeser, the Officer in Charge, points out yet another problem. "Our medical support is at the Naval Support Activity in Brooklyn—about 60 miles from here. Not only do we lose the person for five or six hours, but we pay 15½ cents a mile to boot. I dread anyone coming down with something more serious than a headache.

"Anything worse calls for the person going to the hospital at Philadelphia. Luckily, our people are dedicated—and healthy!"

The test center has taken up the slack for its single enlisted personnel by leasing four apartments nearby as quarters. About half the crew live at Mitchel Field or in Coast Guard housing. The rest have rented or bought near the test center.

Once settled into the community, the crew has found spare time for local endeavors. FTG1 Lew Volk has joined the Bohemia Volunteer Fire Department. FTMC John Farmer heads the Patchogue, L. I., Special Education Parent-Teachers Association and is on the board of directors of the Suffolk County Cerebral Palsy Association. ET1 Ed Anderson teaches a scuba diving course. LT Wyse, the Operations Officer, takes time to teach freshman physics at a nearby college.

As a group, the test center personnel have aided the Maryhaven School for Retarded Children in Port Jefferson, N. Y. One of the Waves taught cooking, some of the sailors teach woodworking, and others installed an emergency alarm system for the school. A public address system was gotten and installed at the Suffolk Rehabilitation Center for the Physically Handicapped.

Many would complain loudly about such irregular hours and the difficulty of living in a high-cost, over populated area. The 23 souls at Ronkonkoma complain some but spend their free time taking care of the less fortunate.

LT Wyse said, "We have an extremely motivated crew. I'm convinced that because of our work here, the entire Perry class will get to the fleet with an eminently operational combat system."

We add that because of their presence at Ronkonkoma, the community has gained as well. ⚓

Classroom tactics hit the beach!

Operation Dawn Patrol '77

With international tensions being what they are, readiness is a key word at NATO headquarters in Brussels. Signifying this concern for readiness, the amphibious assault exercise Operation Dawn Patrol '77 was launched in the early hours of May 11 at *Golfi de Teulada* in Sardinia.

The exercise was designed to test and improve NATO's ability to defend her southern flank by rapidly placing additional military strength in strategic areas. Dawn Patrol '77 involved warships of Italy, Turkey, the United Kingdom and the U.S. Sixth Fleet.

Using tactics developed in classrooms and learned in actual combat, the NATO task force maneuvered through the "aggressor" force to land the elite of the U.S. and Italian Navies

and elements of the U.S. Marine Corps on Sardinia's shores. U.S. Marine Force Reconnaissance Team personnel and American and Italian Underwater Demolition Team members embarked upon clandestine night surveys of the target beaches.

The Underwater Demolition Team (UDT) searched out safe approaches to beach small landing craft. Also, if the enemy had placed obstacles above or below the waterline or if natural sand bars made the beachhead too shallow for navigation, UDT was tasked with removing those obstacles.

Force Recon is a highly trained team of Marines who provide data against the enemy such as gun emplacements, troop strengths and possible helicopter landing zones.

Throughout the night of May 10-11, information received from the special warfare groups on the beach was analyzed and charted for dissemination to the waiting task force. At first light, carrier-based aircraft thundered over the beachhead on surveillance and bombardment passes in preparation for the assault which followed. Amphibious ships arrived in the immediate area and unloaded dozens of assault landing craft; four waves of small boats churned toward the beach carrying tanks, supplies and hundreds of combat-ready troops.

Mayhem soon turned into order as NATO troops secured "enemy" strongholds and set up defense perimeters. For the man in the field the "war" was over; for the men in the command ships, the hours and days of analyzing the lessons learned had just begun.

Top: Combat ready Marines await the call to join the "battle." Above: HTC Sprenkle of UDT-21 readies gear for surveillance operations. (Photos by JO3 Mark DeWeese).

Solid Shield '77

Supplies, fuel and medical assistance are the crucial aspects of an amphibious landing. Teamwork and coordination are the means employed by the Navy/Marine Corps team in seeing that the men in the field get the necessary support when needed.

The opportunity to exercise and test the logistics support organization of the Navy/Marine Corps team came on May 7 when ships of the U.S. Sixth Fleet and elements of the 4th Marine Amphibious Brigade took part in exercise Solid Shield '77. The annual training exercise involved all four branches of the armed services.

The "battle theater" was more than 3500 square miles in the southeastern United States, centered around Camp Lejeune, N.C. and Fort Stewart, Ga.

Army and Marine forces simulated beach and airborne assaults on "enemy" held territory, while the Navy/Marine logistics force executed the logistics portion of the exercise to a successful conclusion.

The scenario for Solid Shield '77 went as follows: Country Blue is a democratic nation of long standing friendship with the United States and has a bilateral mutual defense treaty with the U.S.

Country Red is a nation unfriendly to the United States and to Country Blue and shares a common border with Country Blue.

A series of border clashes broke out in early 1977 between Blue and Red over long standing boundary disputes. Negotiations encouraged by the U.S. collapsed and Red subsequently invaded Blue. The situation rapidly deteriorated resulting in the partial destruction or neutralization of Blue armed forces.

Country Blue invoked the treaty with the United States and requested U.S. military assistance. The United States honored the treaty and JCS directed Commander-in-Chief Atlantic to provide military assistance.

Unconventional warfare forces were infiltrated into "enemy" held territory on May 7. On May 12 an air superiority campaign was initiated in Joint Zone Blue airspace and evacuation operations were launched at Fort Stewart.

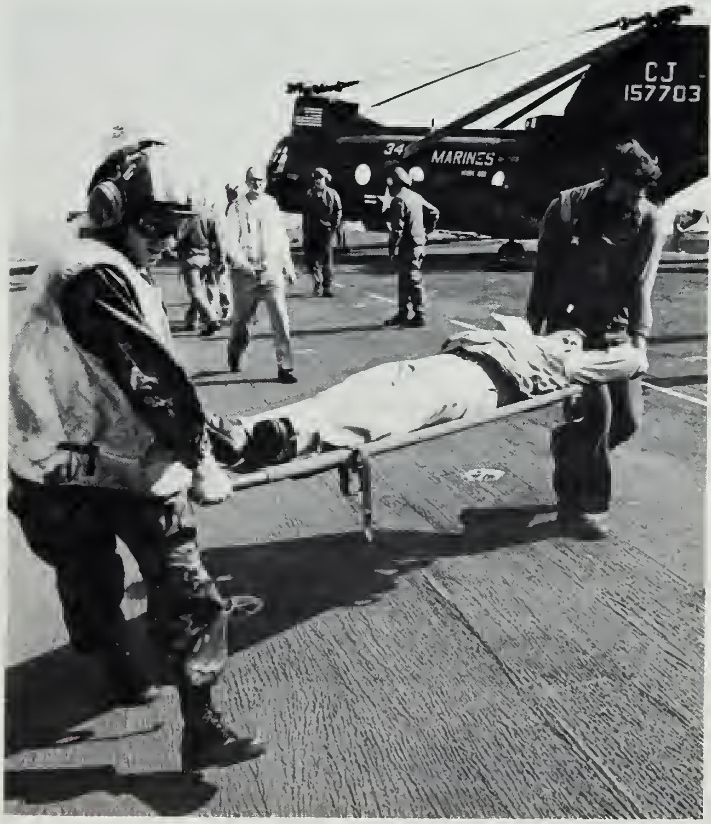
The evacuation of U.S. citizens and foreign nationals is a new tactical situation added to the exercise this year because past experiences in Southeast Asia and the Middle East have indicated the need for such evacuation plans.

Evacuees, played by 120 U.S. Army male and female personnel, were evacuated by Marines to Navy ships at sea.

Female personnel were returned to shore before nightfall.

On May 17 simulated amphibious and airborne assaults were launched and with the Air Force providing air cover and the Navy guarding the seas, Marine and Army troops engaged and neutralized the enemy.

By May 25 the conflict was over and Country Blue was "secure."



Above and right: After a simulated fire and explosion, casualties are evacuated. (Photos by LCDR J. Manias, Jr.)

SILENT WITNESS

STORY BY JO1 JERRY ATCHISON
PHOTOS BY PH2 DWAIN PATTON

Late in the evening, the lighthouse keeper awoke with a start

He heard a sound. Casting about for a weapon, he picked up a wooden bed slat and stood up. Then he heard the sound again and knew he hadn't been dreaming. Outside, someone was slowly mounting the steps to the quarters. The sound stopped as the intruder reached the porch. The keeper tightened his grip on the bed slat and moved quietly to the front door. He placed his ear against the door and heard the sound move across the porch and stop directly outside his door. Sucking in his breath and raising his weapon, he threw open the door.

There was no one there.

* * * * *

The visiting Dutch veterinarian settled back for a long night's sleep after a hectic day of sightseeing in the area. It was his first trip to the United States and he had spent the day marveling at sights, not the least of which was the quarters he'd been given for the evening.

Who'd have thought, he mused, he would be spending the evening in the quarters of the oldest lighthouse on the Gulf of Mexico. He settled into the comfortable bed.

Suddenly there came a loud crash from the living room. The veterinarian had draped his trousers over an easy chair in the living room before going to bed so his first thought was of his wallet and the possibility of a burglar.

He raced into the living room. Sure enough, the massive easy chair was overturned. But there was no one in the room.

The only thing missing from his trousers was his belt, a belt that was never recovered. He made the rounds of the room and checked the door and all the windows. All were securely locked and none had been broken.

* * * * *

For those of you who thought we were describing the goings on in a lighthouse on some mist-shrouded island, guess again. This lighthouse, surrounded by more than 150 years of mystery, is on land belonging to the Naval Air Station, Pensacola, Fla.

The lighthouse sits near the mouth of Pensacola harbor guiding mariners as it has since 1828. To the casual observer it looks much like any of the other lighthouses populating the coast of the United States. But this lighthouse has a colorful and unique history all its own. The story begins two years before the lighthouse was conceived:

One of the first things the United States recognized in 1821 after purchasing Florida from Spain was the importance of Pensacola Bay as a site for Naval squadrons operating in the Gulf of Mexico and the Caribbean.

And, given that conclusion, one of the first things the U.S. government had to do was make the bay safe for ship navigation—hence the lighthouse.

It was completed in 1825 at the bargain price of $6,000. In 1828, a fresnel lens for the lighthouse was cut and polished in Paris, France, by Henri LePaite. As a testimony to Henri's workmanship, it is noted that this original lens is still in use today at the same location.

The first lighthouse built by the United States Government on the Florida Coast was ready for operation—but it didn't operate quite as well as anticipated. The first tower was 40 feet high atop a 40-foot bluff. An 1832 lighthouse guide warned against depending on the light at night, when it should have been most useful. It seems trees on Santa Rosa Island to the east and on the mainland to the west obscured the beam.

Captain L. Rousseau of the Revenue Marine urged the Fifth Auditor in 1838 to move the light, "as to enable our cruisers to leave or enter the port at any time of the night."

This was particularly important to mariners of the period since Pensacola was the deepest haven on the Northern Gulf, with 21 feet of water at the entrance and as much as 36 feet in the harbor.

Congress authorized $25,000 to rebuild the light using the best of apparatus. The new light, still in use today, was completed in 1858. Now located 210 feet above sea level, the beam is visible for 21 miles.

When the Civil War struck, Pensacola assumed added strategic importance for both the Confederate and Union troops. Besides the hundreds of Americans who died in battles in and around Pensacola, there was one additional casualty. Although the tower was struck repeatedly by solid shot from both sides, it appeared there had been no serious structural damage done. It was not until 1878 that the effect of the shelling was recognized . . . but more of that later.

When Union forces finally captured and held Pensacola, they attempted to relight the tower beam to aid Union ships. However, they found that the lens and apparatus had been dismantled and hidden. They erected a temporary light and set off in search of the original equipment. Four years after the war, the original lens and apparatus were finally found, reassembled and placed back in operation.

Men had taken a crack at destroying the lighthouse and failed. After the Civil War it was Mother Nature's turn. In 1875, the tower was twice struck by lightning, melting some metal fixtures and breaking several large holes in the covered brick walkway connecting the tower and quarters. But, once again, no physical damage to the tower was discovered.

Lightning didn't do the tower in so nature threw periodic hurricanes against it.

Taken separately, these periodic buffetings had no telling effect on the tower. Then, in 1878, engineers discovered that the Civil War shelling and subsequent hurricanes had combined to cause cracks below the lantern. The tower was refurbished top to bottom and painted with the color scheme it sports today, the top two-thirds black, the bottom third white.

But if man had stopped trying to knock the tower down, nature hadn't. On August 31, 1885, a rare earthquake struck the area. The Pensacola Station clock was stopped by the quake at 9:07 a.m. The lens shook from side to side and the tremor "was accompanied by a rumbling, as if people were ascending the steps, making as much noise as possible," according to published reports of the day.

Still, despite it all, the lighthouse continues today to flash its beacon at ships in the harbor, seemingly unperturbed by the disruptions of the past. Over the years, a steady procession of lighthouse keepers climbed the 190 steps up the spiral staircase every four hours to check the kerosene level, trim the wick, or perform required maintenance. Nowadays the light source is furnished by electricity and the operations are automated. When the sun sets or when heavy weather or blanketing fog roll into the harbor these days, light sensors automatically activate the light.

And since the lighthouse keeper's quarters are no longer required, NAS Pensacola's Special Services has taken over the spaces—renting them out Navy Lodge fashion to an occasional visitor. Which brings us back to the

A 150-year-old lens along with water-spouting gargoyles are only two of the many distinctive features of Pensacola Lighthouse.

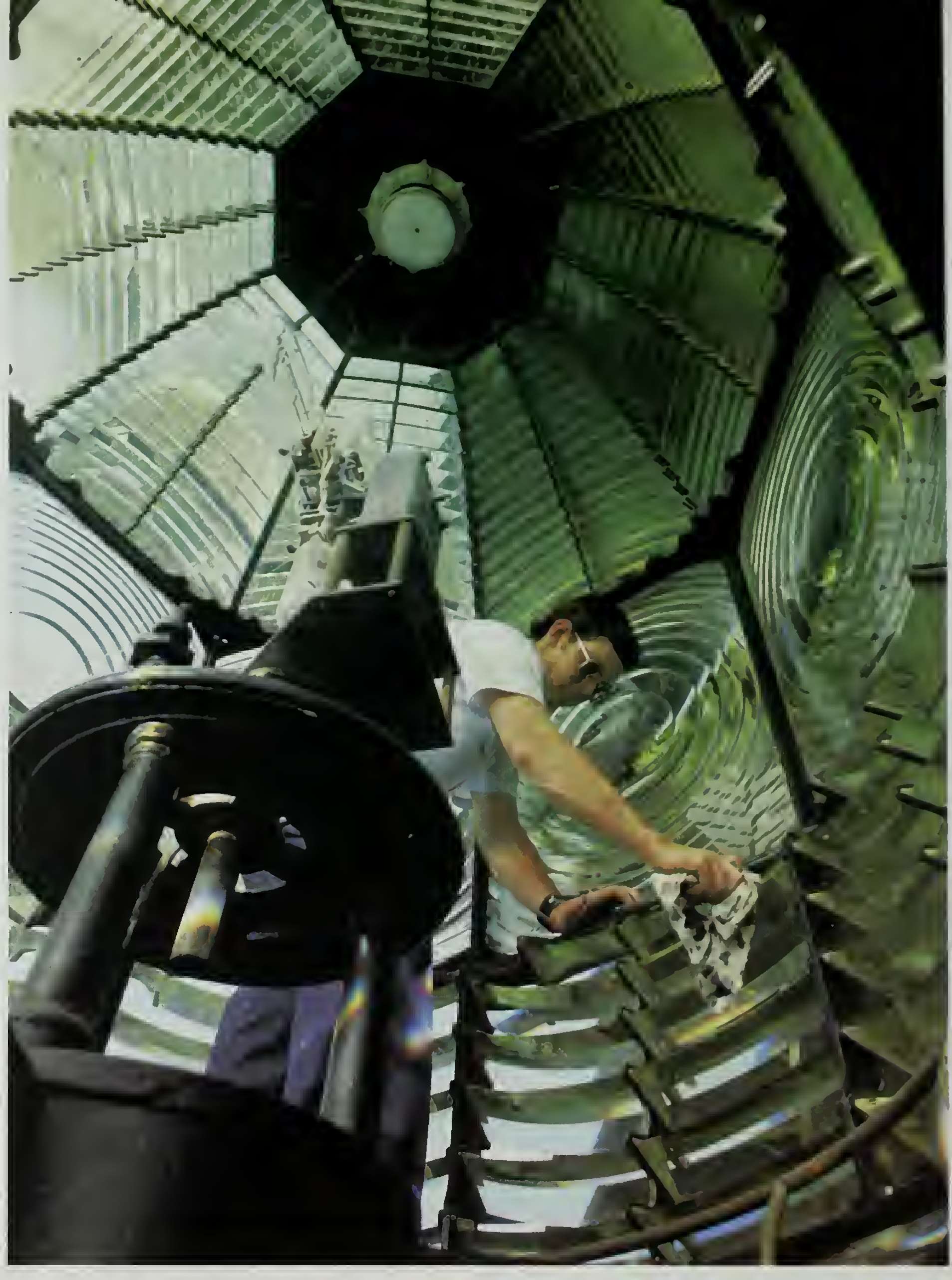
noise on the porch and the overturned chair.

According to Sandy Morden of Special Services the noises are caused by a "friendly" ghost who stalks the lighthouse keeper's quarters. Sandy, by the way, also takes pride in the fact that she is the only woman on the Special Services staff who doesn't mind entering the quarters alone. "The rest of the girls travel in pairs around that place," she said.

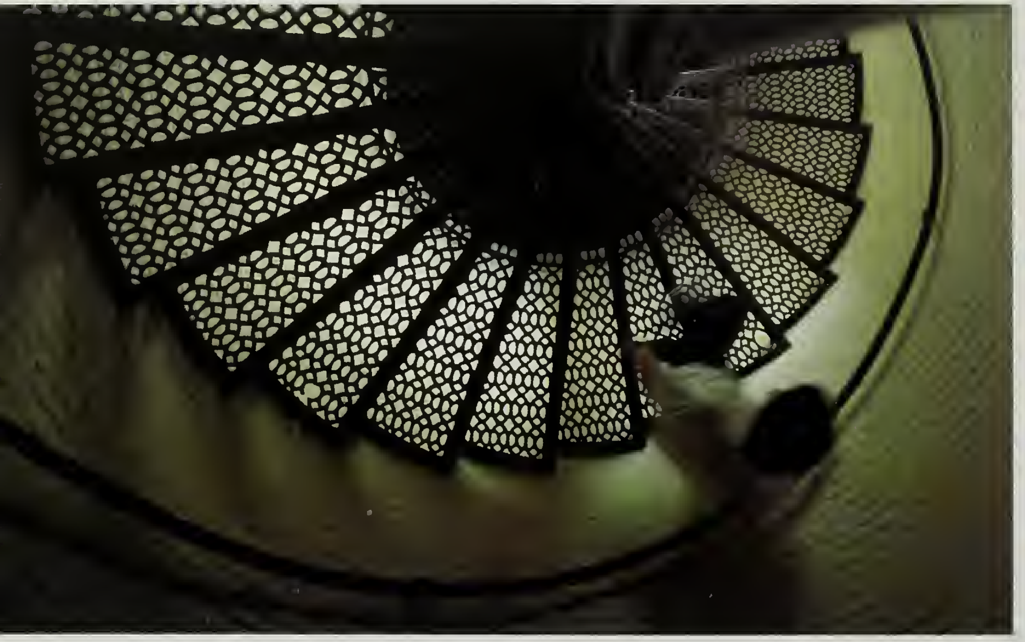
As to the ghost's identity? No one knows. Nor has anyone actually *seen* the ghost. Or, if someone has seen the ghost, they're sure not talking.

In any event, the original lens in the Pensacola lighthouse turns 24 hours a day (in order to prevent the lens from focusing light on any object and setting it afire in the daytime). Nowadays it is visited only by the occasional Coast Guardsman who gives the lens a quick shine and checks out everything else.

Should you decide to take advantage of the Special Services' offer of lodging in the old quarters, the best advice would probably be to keep an eye out for an apparition sporting a new belt. ⚓



Clockwise from right: A Coast Guardsman cleans the massive lens from the inside. Sunlight, in a kaleidoscope effect, bounces multi-colored off the tower's wall. The spiral staircase has 190 steps to the tower— for those who care to count.



Information Exchange

Q. *I purchased a home in 1957 and had the loan guaranteed by VA. I sold the home and the loan has been paid in full. Is it possible for me to obtain another VA-guaranteed home loan?*

A. Since you disposed of the home and the original GI loan has been paid in full, your loan privilege can be restored. Contact your nearest VA office for full information.

Q. *Does the Navy exchange make a profit?*

A. Yes. The exchange makes a profit, but every cent of net profit (the money left over after all expenses are paid) is returned to the men and women of the Navy in the form of morale and recreational facilities and equipment.

The exchange makes a heavy contribution to local recreation funds and to the Navy Central Recreation Fund. The money is used to support activities such as hobby shops, bowling alleys and movie theaters; buying recreational equipment, sporting goods and supplies; upkeep of ball fields, golf courses, swimming pools and other morale and recreation programs.

In fiscal year 1975, for example, the contribution to recreation programs generated by all Navy exchanges amounted to $66 per active duty person in the Navy.

Q. *What specific missions does the Military Sealift Command (MSC) perform?*

A. The command has five basic missions. One is to provide sealift for deployment and support of military troops in an emergency. MSC also is charged with delivery of military sea cargo worldwide in peacetime, which helps the command fulfill a third mission—to develop and maintain the expertise and assets necessary for expansion in an emergency.

In addition, MSC operates ships for other Navy units such as the Oceanographer of the Navy and Naval Research Laboratory. More than 25 ships are involved in ocean research and surveys.

A fifth mission involving 16 ships is perhaps better known within the Navy—fleet support.

Q. *Does the Navy censor or cut movies?*

A. No. Paragraph 214 of the Navy Motion Picture Service Manual specifies that "Navy motion pictures will not in any way be censored, altered or cut by any users thereof. The Navy Motion Picture Service procures the 'as is' commercial theater version of all feature pictures. Commanding officers may decide not to exhibit certain pictures in their command if, in their opinion, its exhibition would have an adverse impact on morale, but no alteration will be made."

Q. *I have an idea that, I think, could improve the safety of rigged brows. Is there any way I can communicate it to the Navy's surface forces?*

A. Write out your ideas on a Surface Ship Safetygram. A Safetygram can be filled out in pen or pencil, and requires no postage. It should be made out with carbon copies and mailed as the instructions on the bottom of the form indicate. Your ship's safety officer can assist you.

Q. *Are Navy and Marine Corps women members who are pregnant when separated upon expiration of their active-duty obligation, or who elect separation because of pregnancy, eligible for maternity care in military facilities at government expense?*

A. Yes. There are three important points to remember:

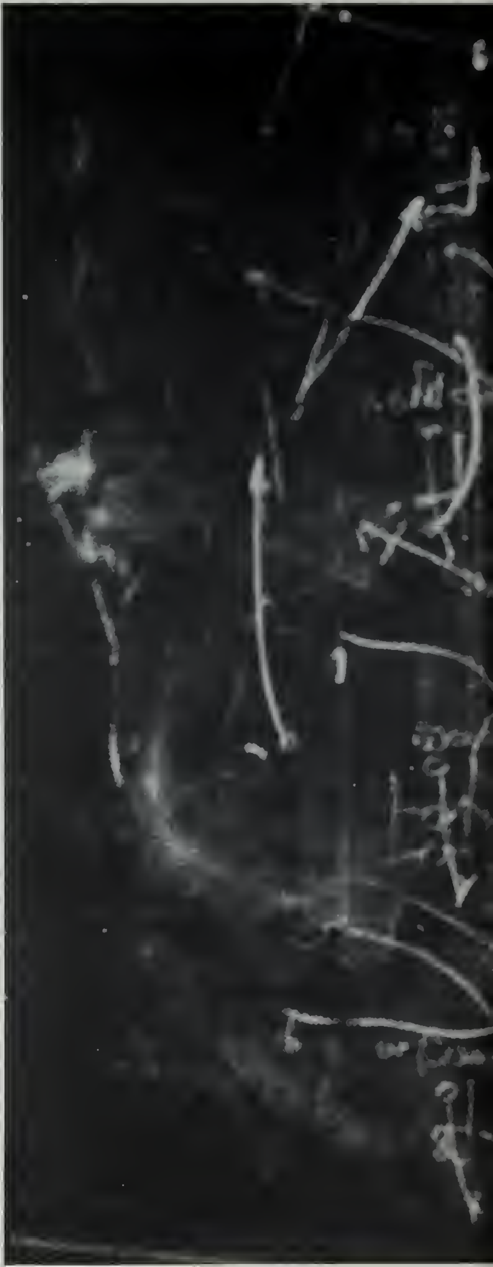
- The Government will only pay for care provided by a military medical facility. This means that the Navy will not pay for civilian care even if there is no military medical facility nearby, or if the military medical facility cannot provide maternity care.
- The pregnancy must have begun while the member was on active duty. Members who were pregnant at the time they entered on active duty are not covered.
- The former member should apply, with her separation papers, to a Navy medical facility at least 30 days prior to confinement. If a Navy facility is not available, she may apply to an Air Force or Army medical facility that offers maternity care.

The nearest Health Benefits Counselor can tell you if the military facility nearest your intended residence has maternity care capability.

Q. *I am a Reservist on three years of active duty and I have not passed the E-4 exam. Therefore, I have not met professional growth criteria for reenlistment. Can I agree to extend my active duty obligation for a period of time other than 12 or 24 months, as indicated in BuPersInst 1133.22E?*

A. Yes. A 12- or 24-month extension of either active duty or enlistment can be authorized by your command. However, a request for such extension for any other period of time must be made to the Chief of Naval Personnel.

'I put myself in the player's position'



Navy head football coach George Welsh is beginning his fifth season at the Academy convinced that the midshipman are going to be a team that must be reckoned with in the fall.

With spring practice completed and many of the players on their summer training cruises, Coach Welsh had time to talk with ALL HANDS about his team and a new position—that of Special Assistant to the Chief of Naval Operations for Physical Fitness—for which he was recently selected.

"I believe physical fitness is important to the individual," he said during the interview at the Naval Academy. "And it can be done anywhere—including aboard ship."

Here's why George Welsh knows what he's talking about: As the midshipman starting quarterback for three seasons (1953-55), he smashed eight different Naval Academy records and put together a Navy upset over heavily-favored Mississippi in the 1955 Sugar Bowl.

Assigned to USS *Des Moines* in 1956, Welsh played one year for the Norfolk, Va., Naval Base Tars. But torn ligaments before the 1957 season ended his active playing. After 32 months in *Des Moines* and a tour with the staff of Commander, Cruiser Division 5, Welsh returned to the Naval Academy in 1960 as a company officer. He assisted with the football program in 1960-61, helping guide the Midshipmen to the Orange Bowl in 1961.

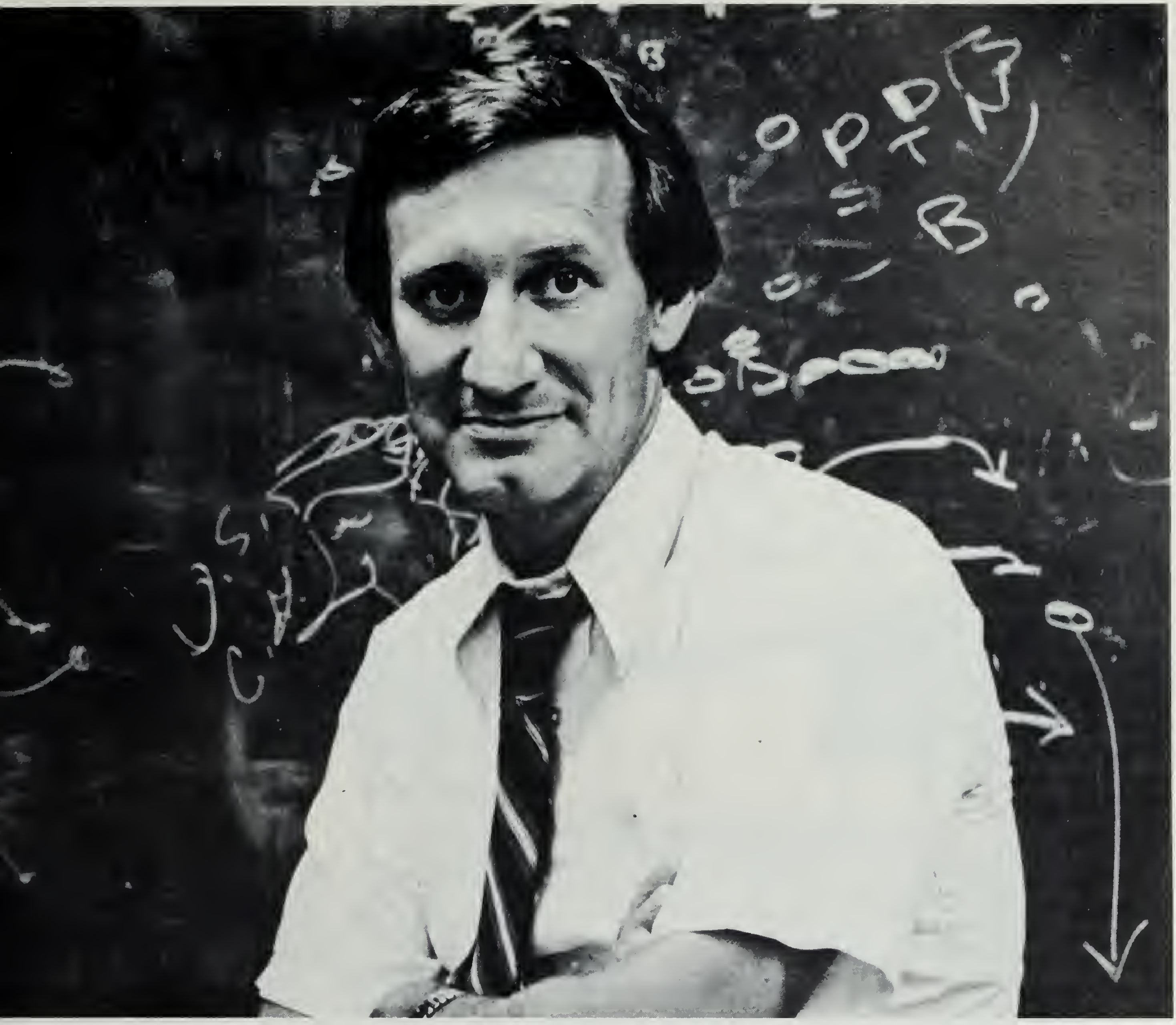
Welsh left the Navy with the rank of lieutenant in July 1963 and joined the Penn State football staff a month later. He spent the next 10 seasons with the Nittany Lions, coaching the quarterbacks and offensive backs, before returning to the Academy as head football coach in 1973.

"Penn State is where I learned a lot about the business of coaching," he said. That experience, plus his playing days, have combined to make his own philosophy of coaching: "I'm always trying to put myself in the player's position when I'm coaching," he said.

"The difference between football when I played and today is that the game has become more sophisticated . . . and the players have become better athletes."

Welsh's experience as a Navy football player, officer and coach demonstrates reasons why he was tapped as the CNO's Special Assistant for Physical Fitness.

In this added role, Coach Welsh will serve as a public spokesman for Navy athletic programs, represent the Navy at athletic conferences and seminars, and provide advice and counsel to the Chief of Naval Operations, Admiral James L. Holloway III. His efforts will emphasize the importance of physical fitness and sports programs in the Navy.



"I know the steel decks of a ship can be hard on the legs," he said in response to a question about the special problems of keeping in shape aboard ship. "But individuals can tailor a program—like the aerobics program, for example—that will leave them feeling much better for their efforts."

If Welsh can appreciate the problems of staying in shape aboard ship because he was there, he can also appreciate the training of his football players for the same reason. "Our training also must take into account the rigid and demanding academic workloads for which each midshipman is responsible," he said.

And what of his team's chances in the fall?

"I'm optimistic. We've got a squad with a lot of returning veterans which is the opposite of last season," he said.

Although not reflected in the final win-loss mark of 4-7, Navy's 1976 team made a late season turnaround, winning their final three games and averaging 33 points and 430 yards of total offense in the process. The last win was over service academy rival Army (See Feb., 1976 ALL HANDS) giving Welsh victories over the Cadets in each of his four years at the Naval Academy.

"We made the mistake of not playing some of the freshmen sooner," he said. "Our game plan is pretty much unchanged this year but we're sure going to take a hard look at the freshman squad early on."

Welsh understands football. But perhaps of greater importance is that he understands football as it is played at the Naval Academy.

"Football can be simple," Welsh said. "If you give the players this life-and-death stuff, you can make them too tight. Winning doesn't override everything else. Our approach is to do the best we can."

That has become a successful football philosophy at the U.S. Naval Academy, thanks to the officer turned coach, George Welsh. ⚓

SLEP Extending

the Life of Carriers

BY JO1 JERRY ATCHISON

The U.S. Navy will meet its global responsibilities in the 21st century thanks, in part, to a program with the curious name of SLEP.

The Carrier *S*ervice *L*ife *E*xtension *P*rogram (SLEP) is being developed by Navy planners tasked with increasing the useful lives of eight conventional Forrestal- and Kitty Hawk-class carriers by an incredible 50 per cent. SLEP will extend the service life of these carriers 15 years beyond their expected 30-year service life, thus allowing the Navy to maintain 12 large deck aircraft carriers in the fleet.

Those extra 15 years will not simply be "borrowed time" for the older carriers. During their extended lives, the carriers will meet the dual objectives of reliable steaming and effective combat operations, using the latest aircraft and equipment.

SLEP will work like this:

First—extensive and in-depth overhaul and refurbishment of basic hull, machinery, electrical and electronic systems will be accomplished on the carrier. These are the primary carrier systems that are heavily relied upon and, therefore, are often quickest to show their age.

Primary systems, along with other systems, require significant repairs to guarantee the 15-year life extension. Because of this, major repairs will also be made to such things as the inner bottom and below bilge tanks. In addition, most previously deferred hull and structural repairs will be performed on the carrier in SLEP.

Auxiliary systems repairs will include vent system renewals and major repairs and replacement of piping systems throughout the ship.

Another requirement of the future indicates why *Forrestal* and subsequent class carriers were selected for SLEP and not some of the older carriers. Simply put, the 21st century aircraft carrier

must have a 21st century combat capability. Forrestal-class carriers are large enough to support adequate numbers of all present and anticipated aircraft—aircraft that will serve as the principal combat arm of future carriers just as they have in the past. In other words, the carriers retain growth potential.

SLEP carriers will also receive modernization of their pollution control systems, thus ensuring they meet expected stringent pollution control requirements of the future.

Finally, and of great importance to the thousands of sailors who serve aboard the carriers involved, improvements to habitability will be made throughout the carrier.

Aircraft carriers are one of the most complex weapon systems in the United States' deterrent arsenal. They are also one of the most effective. Because of this complexity, and the countless jobs performed by the 5,000 officers and men who man each carrier, SLEP will not be an easy job. Planners continue to examine such questions as what's to be done and when, where will it be done and how long will it take, how to accomplish ship's company training on old systems and new, and the effect on ships operating in the fleet which fill in for the carrier in SLEP.

After much study, Navy experts have developed initial answers to many questions. Anticipated to cost between $400 and $450 million per carrier—SLEP is below the estimated $1 to $2 billion price tag for replacement of old carriers. Based upon extensive studies done by numerous Navy Department activities, SLEP will require a carrier to be in "Out of Commission Special" status (the status applied to ships undergoing extensive modernization or conversion, as designated by the CNO) for about 28 months.

Pulling a carrier from the fleet for SLEP will result in minor adjustments for other operational carriers. Current schedules call for USS *Eisenhower* (CVN 69) to enter service this fall. *Eisenhower* will replace USS *Roosevelt* (CV 42) which is scheduled for decommissioning at about the same time. USS *Vinson* (CVN 70) will become the 14th carrier in the Navy's inventory when she enters service in late 1980. There will then be 12 deployable carriers; plus one contingency carrier supporting Reserve air wing training, mobilization and other contingencies; and another carrier in SLEP.

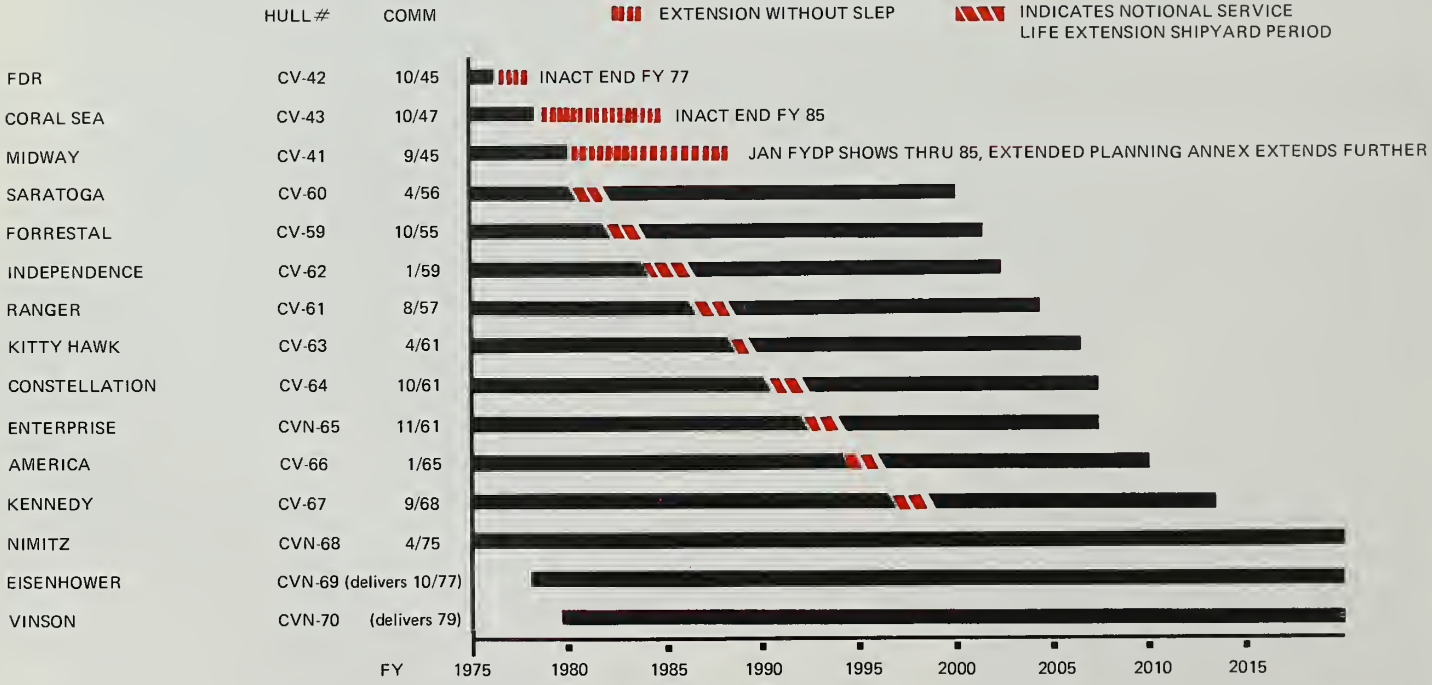
It can be seen, then, that the first aircraft carrier to undergo this program of extensive restoration will not do so until 1980. It is expected to return to duty in 1983. The accompanying chart shows how staggering the schedules of ships in SLEP—up to the year 2000—allows for minimal impact upon fleet readiness.

The massive program that is SLEP is by no means in its final form. The goal is solidly set: extend the life of these designated carriers from 30 to 45 years.

In view of the fiscal restraints of all the armed services, SLEP represents a positive solution to maintaining the U.S. Navy's readiness.

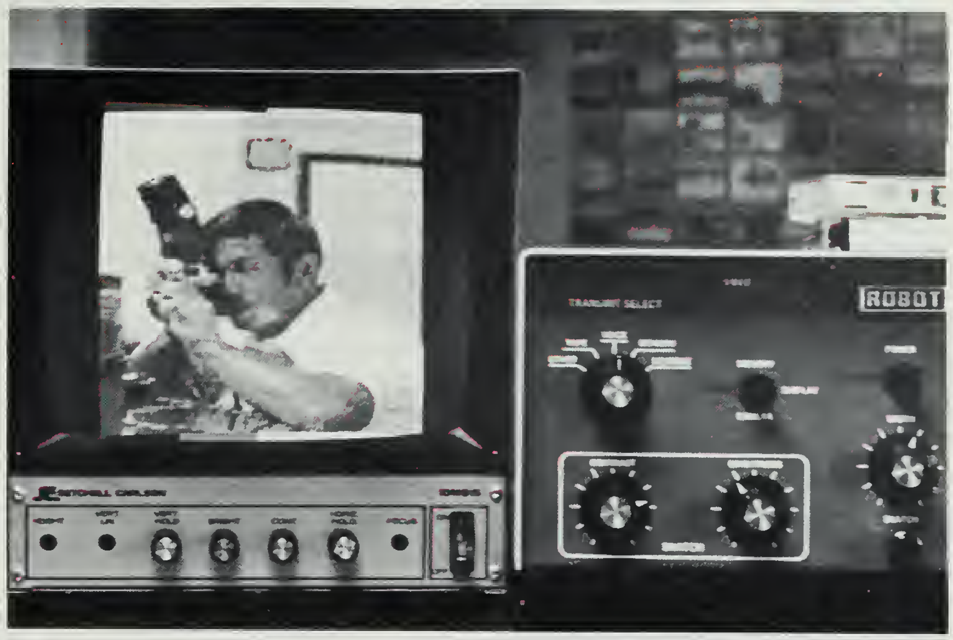
And some of the "grand old ladies of the fleet" will be possessed of capabilities that belie their years of steaming—thanks to SLEP, which isn't such a curious name after all.

CARRIER FORCE LEVEL PROJECTION/SERVICE LIFE EXTENSION PROGRAM (SLEP)



IF AUTHORIZED AND APPROVED BY CONGRESS CVV WOULD DELIVER IN 1986

MARS Does It With Picture



"Stand by for transmission," said the operator of WA6IDN/WA1ZQP, flicking switches and turning dials. A warbled chirping sound erupted from the console and twittered steadily.

A TV monitor (screen) plugged into the console showed the image of a man aiming a camera. As the twittering continued, a horizontal line passed down the image, almost as if the horizontal hold needed adjustment.

"Hey, the photographer looks great at this end," said a voice from more than 3,000 miles away.

To some, this may seem as mind-boggling as "Captain James Kirk" ordering "Mr. Spock" to beam him up to the Starship Enterprise. But far from being science fiction, this transmission of a TV image across the breadth of the U.S. via radio waves was part of a little-publicized Armed Forces Day observance.

For the past 28 years, Armed Forces Day has been set aside by Military Affiliate Radio Stations (MARS) to conduct "cross band" tests; that is, to communicate with amateur radio operators using various modes of transmission.

Transmitted from the Coast Guard Radio Station in Alexandria, Va., and Naval Communications Stations in San Diego, Norfolk, and San Francisco, these tests give amateur radio operators an opportunity to demonstrate their technical skills. On Armed Forces Day, the message of the Secretary of Defense is transmitted via morse code, radio-teletypewriter and voice communication. Amateurs submit the message exactly as they received it, and are awarded certificates for their participation. Each year, up to 3,000 certificates are awarded.

This year, for the first time, MARS used "slow-scan" TV, similar to the wire-photo system used by news services. A photograph—in this case a TV image—is scanned and relayed via radio waves. The "twittering" or sound can be recorded so that images or messages can be reproduced when needed.

Of 300,000 licensed amateur radio operators in the U.S. about 4,000 have slow-scan TV equipment. The radio station in Alexandria transmitted pictures as far as Vancouver, Wash., and Culver City, Calif.

Station WA6IDN/WA1ZQP—actually Bruce Johnson of the American Radio Relay League (ARRL)—brought his slow-scan equipment from Newington, Conn., and retired Navy Commander Frank Somers (N1FS) brought his equipment all the way from Cornwall, Vt. Johnson joined David Klemp (WA1AND) at the console, while Coast Guard Radioman 1st Class Chuck Duvall (WB4BQX) operated the video-camera. Coast Guard Commander Ken Wasner (W3IKA) was also on hand throughout the day.

Retired Navy Captain Dave Veazey (W4ABY) coordinated the 14-hour broadcast day on the east coast and Retired Navy Captain Thomas Pollock coordinated operations on the west coast.

Several times during the day, communications were interrupted by a jamming signal. It sounded like a woodpecker pecking on a hollow tree.

MARS is most recognized for its involvement with telephone patches and MARSGRAMS, which enable military personnel overseas or aboard ships to communicate with their families in the States.

Summing up the day's event, Capt. Veazey said, "This is the one day of the year when the military shakes hands with the civilians over the air. Now we can do it with pictures." ⚓

Bearings

Aiguillette for Sharkey

Don Rickles (TV's CPO Sharkey) takes a break in filming to accept an Aiguillette Association honorary membership from USNTC San Diego Electrician's Mate 1st Class Bill Spears. The Aiguillette Association was formed to encourage camaraderie among Navy company commanders and to promote their welfare through charitable, educational and recreational programs.

In the Neighborhood

A chocolate sundae plus two ship models—one of clay and the other made of cardboard and toothpicks—were highlights of the visit. It grew from an exchange of letters between USS *Oklahoma City* (CG 5), participating in overseas residency program in Japan, and fifth-grade students of St. Brendan's School in North Olmsted, Ohio.

Captain Paul D. Butcher was *Oklahoma City's* commanding officer when William Eichenberg, a school history teacher, wrote two years ago and asked permission to name a classroom after his ship and correspond, as well, with the crew. The exchange of letters also included an exchange of tape recordings, cards and even gifts. The correspondence grew into a friendship.

Capt. Butcher was recently transferred to Washington, D.C. This made it possible for him to take the students up on an earlier offer to visit them anytime he was "in the neighborhood." He recently spent a day at St. Brendan's visiting classes and answering questions about Navy life, operations and his travels.

The North Olmsted students enjoyed the *Oklahoma* experience so much that other classes—the second, third, fourth and sixth—joined in and began corresponding with other ships. The other ships on the list were USS *Vulcan* (AR 5) USS *Claude V. Ricketts* (DDG 5), USS *Jouett* (CG 29), USS *Chicago* (CG 11) and USS *Concord* (AFS 5).

700th Out of 6000

Physical conditioning, perseverance and a goal can put you miles ahead of the crowd. If you're skeptical, just ask Marine Corps Captain Thomas P. Carney, combat cargo officer aboard the amphibious cargo ship USS *Charleston* (LKA 113).

His daily schedule of sit-ups, push-ups, pull-ups and running enabled him to join a very select group of athletes who have finished the tortuous 26-mile Boston Marathon. Carney ran America's most prestigious running event in April along with 6,000 other contenders; it was the largest turnout in the Marathon's 81-year history.

Twenty-five hundred of the contenders were "official" entries— those who had completed a previous marathon in a qualifying time of three hours or less. The rest were there to participate in an event unparalleled except perhaps by the Olympics.

"There were so many people it took me two minutes of hard running just to reach the starting line," Carney said.

Long before the race ended, a conflict between body and willpower began to trouble most runners. Carney was no exception.

"I was never ready to quit," he said, "however, I played with the idea after eight miles. But the people along the route were great— they encouraged us and gave us refreshments the entire time."

Carney finished the race in three hours, 28-minutes; his place was "about 700th." Earlier this year, he placed 71st in his first marathon, the Shamrock, at Virginia Beach, Va. Still, the Shamrock's 450 runners didn't prepare him for the throngs he found in Boston.

Tampa's Chief Duke

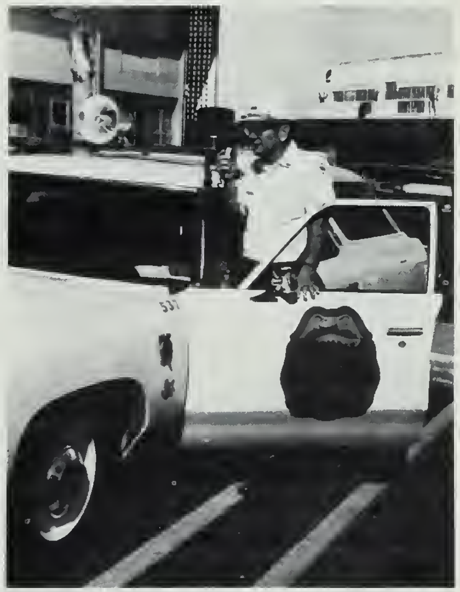
"Chief One, what's your 20?"

"I'm 1050 to 1006 31st Avenue. Looks like a Code 4. I believe Engine One is already on the scene."

"10-4, Chief One."

What's a "Chief One"? In this case, despite the lingo used, it's not a CBer's handle and although the "Chief" is a Navyman, it's not a new form of salutation either. The "Chief" is James E. Duke, a reserve Senior Chief Boatswain's Mate *and* Tampa, Fla. District Fire Chief. Any way you look at it, Duke's a chief.

Duke is attached to reserve Military Sealift Command 208, in Tampa, which is responsible during emergencies in assisting MSC in coordination of sea transportation of personnel and cargo. Coincidentally, Duke's previous fire fighting assignment was also a seagoing one. He was captain of the fireboat which provided the only fire protection for Tampa's 21-mile shore line, Still, speaking of coincidences, the fire chief was a fireman apprentice in the Navy during World War II which, of course, has nothing to do with being a fire fighter but, then . . . .



Trippe Takes a Trip

Sure, sailors have heard of ports like San Diego, Norfolk and Rota—but Monrovia, Lomé and Abidjan?

Recently the crew of USS *Trippe* (FF 1075) visited these three West African ports while enroute to the Mid East. Before you all rush off to your atlases, be advised Monrovia is in Liberia, Lomé in Togo and Abidjan in the Ivory Coast.

Although this was the third Mid East cruise for the *Trippe*, it was the first visit of a U. S. Navy ship to Lomé since 1967 and to Abidjan in the last three years. And as far as port visits go, it was anything but routine. More than 4,800 people—many of whom had never seen a U. S. Navy ship—visited *Trippe* and were treated to the *Trippe* band, beverages and snacks.

In each of the ports, Navy men were, in turn, entertained with dinners, receptions, dances and sporting activities held in honor of the ship.

Making an Impression

Dental Technician 1st Class Larry Hamill didn't think he was going to have a very good day in the prosthetics lab at the Branch Dental Facility at Patuxent River Naval Air Station.

The boss had just told him that his first patient would be a wounded tomcat. When Hamill objected to putting his hand inside the animal's mouth, he was told it was the other end of the tomcat which needed his attention.

Hamill finally accepted the job (how do you say "no" to a captain?) and then recruited Dental Technician Seaman Curtis Morgese to work with him. Morgese wasn't particularly enthused about the idea either, but it's not easy for a seaman to say "no" to a first class petty officer, either.

Now that it's over and the plaudits are rolling in, Hamill and Morgese consider it one of their more rewarding days. The 20-ton tomcat aircraft had been perfectly still throughout the two-hour operation. The two false teeth specialists had finished all three required casts by the end of the day.

Even more pleased were the maintenance men at the Air Test Center who had asked the two technicians to make a model of a damaged part in the tail section of the F-14 *Tomcat* aircraft.

Statuary Performance

"Man overboard, starboard side! Man overboard, starboard side!" USS *Decatur's* (DDG 31) alarm sounded; sailors raced to emergency stations. Helm and engine orders were passed quickly— Oscar had done it again.

The crew scurried about *Decatur* preparing to retrieve ill-fated Oscar as he bobbed in the ship's wake. Fishermen in the bay also spotted him and decided to assist in the rescue. Everyone's concern was for Oscar.

Here, the record becomes somewhat confused.

As *Decatur* approached Oscar, so did the fishing boats and suddenly he was no longer visible. Rumor has it: Oscar befriended a fisherman—then, a fisherman befriended Oscar; a strong current caused by the converging ship and fishing boats whirled Oscar ashore; Oscar had a sweetheart on the beach and swam all the way there underwater; he went scuba diving; and, finally, he was on a secret mission.

There were many other stories.

What is known is Oscar was not rescued by *Decatur's* crew, nor was he brought back aboard that day. In fact, when he finally returned, 15 days later, it was across the quarterdeck—in the usual way—when *Decatur* returned to port at Subic Bay. He was accompanied by three sailors from the Philippine Coast Guard detachment at White Rock Beach, Subic Zambales.

His absence from *Decatur* generated many other stories which have not been verified, since by nature Oscar ascribes to silence.

One story does have merit, yet comments on it vary. Some say Oscar was imprisoned by the provost marshal, yet on his return to the ship, he had a letter of appreciation in hand which read in part:

"During the period from 15 March 1977 to 30 March 1977, your performance with the Office of the Provost

Marshal has been statuary. Upon arrival in the operations office you took up your post, and manned it throughout your stay in an immobile manner. You are to be commended for the silence and complete composure you maintained throughout your stay with OPM. Your presence was a morale-building factor for all who had the pleasure to observe you.

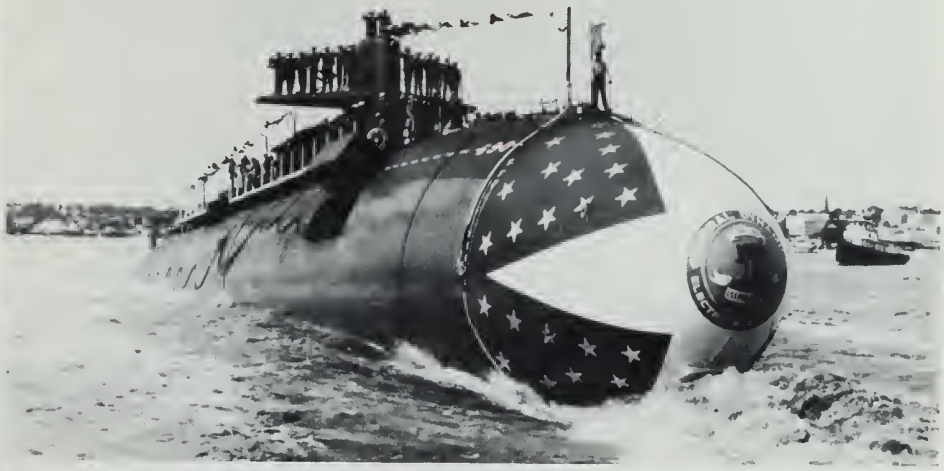
"Oscar, I would like to take this opportunity to extend my sincere appreciation for the services extended during your tour with the Office of the Provost Marshal. If you should again become disoriented in the waters of Subic Bay, do not hesitate to call on this office. Bravo Zulu."

The citation was signed by the Provost Marshal, Colonel R. B. Twohey, USMC.

How Oscar returned and why he remained away as long as he did is still a mystery. What's important to the crew of the *Decatur* is that Oscar, the ship's man-overboard dummy, is back riding high and dry (and probably looking forward to his next swim.).

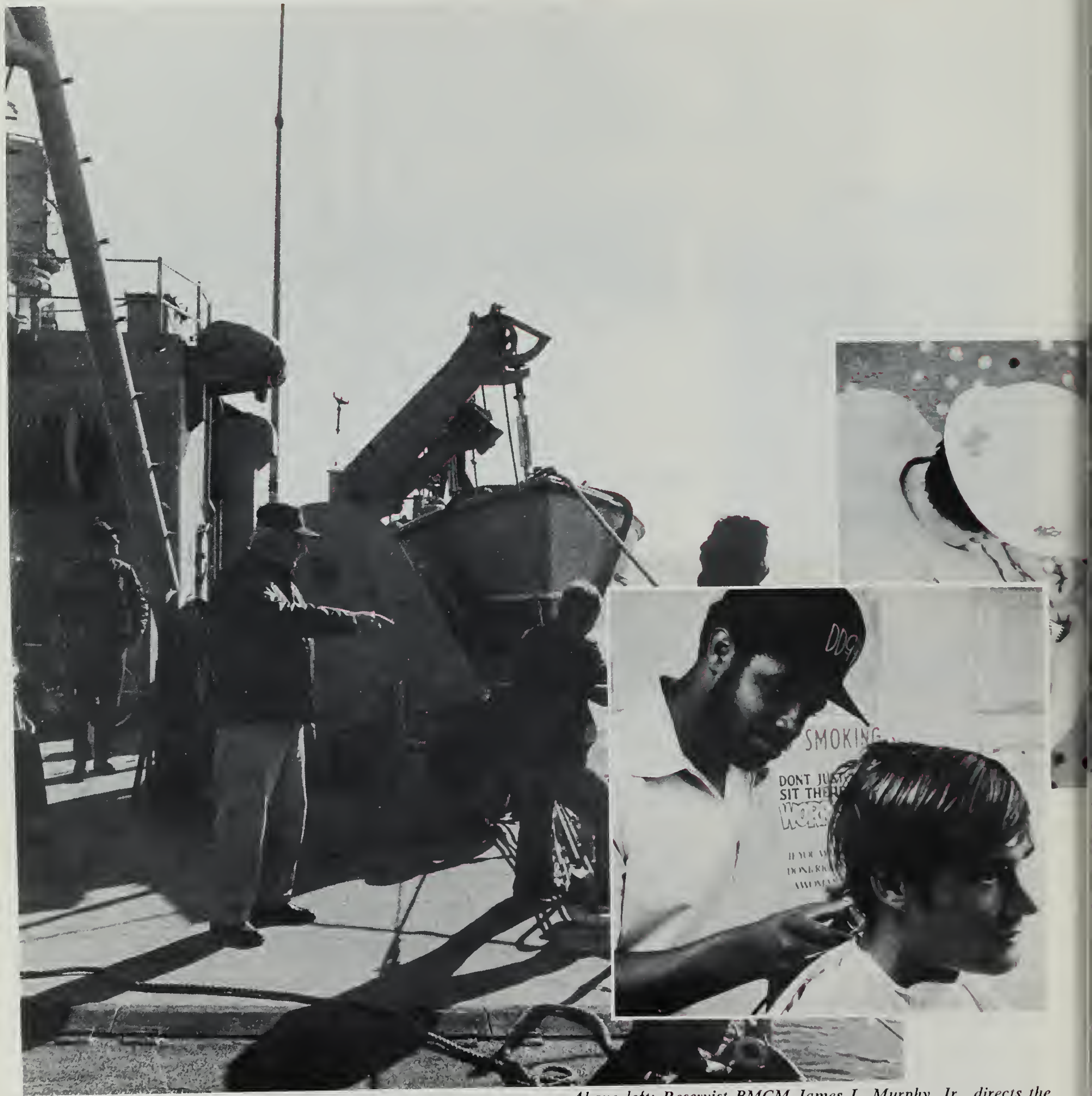
Two More Join Fleet

Although they were unable to attend the ceremonies, Pierre Iberville and William Penn would have been proud to have received invitations to the June 25 commissionings of the Navy's latest *Los Angeles*-class submarines. The class tripled in size when USS *Baton Rouge* (SSN 689) and USS *Philadelphia* (SSN 690) were commissioned in Newport News, Va., and Groton, Conn., respectively. Each displaces 6,900 tons, measures 33 feet in the beam and is 360 feet in length. But if the subs weren't named Iberville and Penn, what do these two have to do with a sub commissioning? Simple, Iberville, in 1719, founded Baton Rouge (La.) — French for "Red Stick" — and of course, Penn, in 1682, founded Philadelphia, the "City of Brotherly Love."



RESERVISTS WITH DESRON 28

Trading Ledgers



Above left: Reservist BMCM James L. Murphy, Jr., directs the securing of USS Edson's *motor whaleboat, Above: Barber, SHSN Worden A. Dorsey, gives SA Scott W. Merrill a haircut. (Photo by FN Jim Borland).*

for Sonar Gear

BY JOC DON RICHIE

Some people—sailors and civilians alike—have the idea that a Navy Reservist's two weeks of active duty for training amounts to some sort of paid vacation. Had they observed the activities of Destroyer Squadron 28 this spring, they would have thought differently. During 14 days of intensive drills in the Atlantic, reservists, comprising one-third of the ships' crews, tested their mettle.

Below: HT3 Daniel M. Valleroy, on board USS Edson, *serves as scene leader during a damage control drill. (Photo by FN Jim Borland).*

During the intricate drills and exercises, reservists served in their usual billets on the bridge, signal bridge, CIC, main control—in all places throughout the ships of the squadron. These reservists, filling out each ship's complement, worked long and hard to distinguish themselves. In the process, they became indistinguishable as they blended

RESERVISTS WITH DESRON 28

with the regular crewmembers.

"We totally support the one-crew concept in Naval Reserve ships and aircraft," said Commander A. A. Nannini, USNR, the Selected Reserve Coordinator on board USS *Edson* (DD 946). "We support complete integration of reserves and regulars into a single crew for each ship."

Unlike earlier times, Naval Reserve Force (NRF) ships today spend as much, even more, time at sea as they do pierside. It shows in the results. Result—a number of the once-a-month and two-week "summer" reserve crewmembers in DesRon 28 have become old hands through continuous exposure.

Each member knows he had better feel that way if he is going to make it. Each is expected to be a professional in his rating or speciality and stand assigned watches in his capacity as a permanent member of the ship's crew. "In my opinion," said Chief Operations Specialist John Pruden, "shipboard training is the most effective program the Navy Reserve offers its members." Though Pruden is a sales engineer with a company manufacturing furnaces and incinerators for municipal buildings during his "off duty time," while on duty, he is the CIC-radar communications officer in USS *Dyess* (DD 880).

Unlike Chief Pruden, some reservists don't get a complete change of vocations when they come on active duty—some see their reserve training as a continuation of their daily work. One is Lieutenant Charlie Brush the acting navigator in *Dyess* who works for a company that trains merchant crews and teaches navigation, fire fighting and radar operation. When he reports for active duty, Brush is ready—he comes aboard carrying a German Plath sextant—and his attitude says, I'm a full-timer. "I love the sea and the freedom it offers," Brush said. "When I'm on ACDUTRA, I have only one boss, the captain, and I'm free to work uninterruptedly at being navigator."

Most NRF ships are among the oldest in the fleet—some are older than the average crewmember who serves aboard. In spite of their age, they get no special consideration, but are put through extensive training maneuvers and exercises like regular ships.

"This ship *(Dyess)* is very functional and obviously well built even though she has been afloat for more than 33 years," said Boiler Technician 1st Bill Bartel. While at sea, Bartel tends the engineering plant. In civilian life, he is a deputy county sheriff in New York state. In spite of occupational constraints, he found time last year to spend six

Left: LT Charlie Brush, acting navigator aboard USS Dyess *during his two weeks of active duty, brought his own sextant along. (Photo by JOC Don Richie).*

consecutive weeks on active duty—all of them at sea.

Another *Dyess* reserve crewmember BMC Matthew Conlon, Jr., has a sort of parallel between his civilian and military life. A former policeman, the Staten Island resident is a supervising fire marshall who investigates fire-related homicides and injuries in the New York City area. In the reserves, he is involved in damage control as well as unreps and refuelings.

"A ship is where it's at," Conlon said. "You learn a lot about yourself at sea, and cruises give superiors a chance to gauge everyone's performance under realistic conditions."

On board USS *William R. Rush* (DD 714), Reserve Lieutenant Henry White found himself conning the ship during an unplanned small craft rescue while other reservists helped coordinate the recovery from the fantail. Regardless of the situation, reservists are expected to react correctly and quickly.

Another reserve crewmember Master Chief Boatswain's Mate J. L. Murphy is no stranger to the deck of a Navy ship. He has 31 years of deck experience and served in World War II during Leyte Gulf and Okinawa. Still he doesn't hold the record for the most service in the reserve force of DesRon 28.

Chief Machinist's Mate Francis D. Murtagh, at 54, thinks his 37 years have the record, for now. "I'm going for 40," Murtagh said, "and then I'll decide if I want to make it a career!" Murtagh served in the carrier Hornet when she carried Colonel Jimmy Doolittle and his B-25's on their famous "thirty seconds over Tokyo" raid. The reservist claims that he is "just an old hand keeping up with the young guys—my boys. I see myself as I was years ago. But don't get the wrong idea, I'm still too young to be a grandfather!"

A certified public accountant, Mark E. Ruocco of West Hempstead, N.Y., trades his ledgers for sonar gear during his ACDUTRA. The Sonar Technician 3rd likes the work and doesn't shy away from the underway chow either. "The regulars tell me that they really eat great when the reserves come aboard," he said. "I've noticed more and more of them in the chow line *before* they go on liberty."

Part of the reason for that phenomenon might be explained by a "ringer" that came aboard with the reserves, Mess Management Specialist 1st William Sawyer. In civilian life he is a dietary cook supervising the main kitchens of the N.Y. Department of Hospitals. He brings many years of galley expertise with him when he comes aboard. Observed Sawyer, "Good lean food is necessary to go with the leaner look for sailors these days."

The reservists bring their professionalism from the work-a-day world into the Navy and often it is rewarded with a "well done." Such was the case during this year's DesRon 28's spring cruise. The squadron was tasked with stalking the carrier *Saratoga* (CV 60) under darkened ship conditions in support of the carrier's Operational Readiness Exercise (ORE). Throughout the night, DesRon 28 ships tracked and "attacked" the "birdfarm" until first light when *Saratoga* retaliated with low-on-the-deck air attacks that kept destroyer personnel on their toes.

Afterward, Rear Admiral J. B. Linder, Commander Carrier Group Four, sent the following message: "DesRon 28, acting as missile attack group . . . provided outstanding opportunity for CV 60 and the Combat Fighting Wing Three. Planning and execution of realistic threat reflected high degree of professionalism. Bravo Zulu, all commands."

Though the work is hard, the hours may seem unending, there is still time for some well-deserved liberty. USS *Charles P. Cecil* (DD 835) made a Miami port visit during one weekend's respite from "combat conditions." This fell in with Cecil's traditional barbecue event and made for an excellent mini-vacation—the only one of the cruise. USS *Vogelgesang* put in at Palm Beach for an R and R weekend interjected between two weeks of hard, at sea training.

Most of the other DesRon 28 destroyers pulled liberty at Port Everglades (Fort Lauderdale). Even though colleges and universities were recessed for spring break at the time and thousands of students flooded the area, "We still had a fabulous time," said one happy reservist.

Both regulars and reservists worked hard and played hard during the cruise, and when it was all over, ComDesRon 28, Captain Edward C. Whelan, added the last word:

"This has been a successful operation. The Naval Reserve Force is a good compromise to achieve a greater total force. With older ships and limited resources, the men of DesRon 28 have tried harder . . . and can be proud of their accomplishments. The exercises and standards are the same for an NRF ship as they are for any other ship. These sailors handled the fast-paced days with a confidence . . . they have proved they can compete with the best." ⚓

THE NAVY'S VITAL LINK WITH SPACE SHUTTLE

BY JO2 DAVIDA MATTHEWS

All of our nation's efforts—Mercury, Gemini, Apollo, Skylab—have barely scratched the surface of space. It is still virtually untouched by man. With the Space Shuttle Program, this nation is taking a big step toward tapping the real potential of space exploration.

Shuttle is NASA's answer to the high costs of space travel. It is not only reuseable but also economical. It will be just as necessary to our nation's future in space as trucks, trains and ships are vital to America's economic life and well-being today.

By the 1980s, if all goes as planned, there will be shuttles blasting off from earth on the average of once a week, making space travel an almost routine daily occurrence.

A vital link in the success of the Space Shuttle Program will be the men and women who fly her.

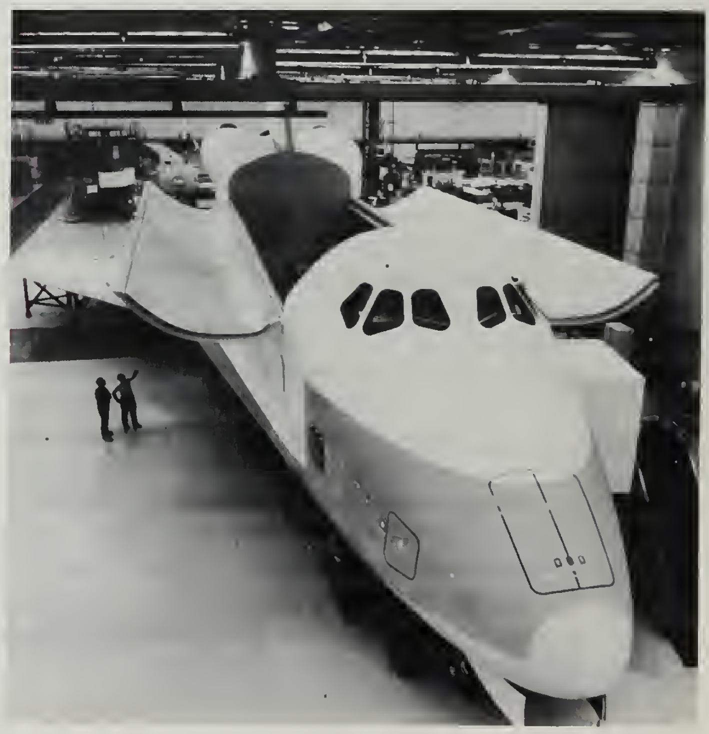
Traditionally, Navymen have been forerunners in space exploration. Alan Shepard, then a Navy lieutenant commander, was the first American in space. His 15-minute flight in Freedom 7 on May 5, 1961, set the pace.

Of the 31 manned space flights NASA has launched to date, only two flights did not have Navymen either as part of the prime or backup crew. And, perhaps the most impressive—of the 14 men who have walked on the moon, nearly half (six) were Navymen.

The Johnson Space Center near Houston, Tex., is the astronauts' home "office;" there are no Flash Gordons here. These men are down-to-earth, just doing their jobs.

Most are small and wiry—average height is only 5'10". One of the requirements for the first group of astronauts was that they be no taller than 5'11". Later, this restriction was raised. Kerwin, at six feet is the tallest of the five Navy astronauts now on active duty.

A Navy captain, Dr. Joseph Kerwin has been on active duty in the Medical Corps since July 1958. He served two



Facing page: Full-scale mock-up of Orbiter with payload bay doors open. Left: Orbiter rides piggy-back atop a modified 747 jet for approach and landing tests. Below: Shuttle reenters atmosphere.

years as flight surgeon at Cherry Point, N.C., earned his wings in 1962, then became flight surgeon for Fighter Squadron 101 stationed at NAS Oceana, Va. He was subsequently assigned as staff flight surgeon for Air Wing Four at Cecil Field, Fla.

Capt. Kerwin became interested in the space program after two of his friends applied and were accepted. "Through them, I could follow closely just what training they received to become astronauts. It was fascinating.

"When NASA asked for applications for the selection of a group of scientist-astronauts, I felt it was only natural that I apply. The space program was the next logical step in a career I enjoyed."

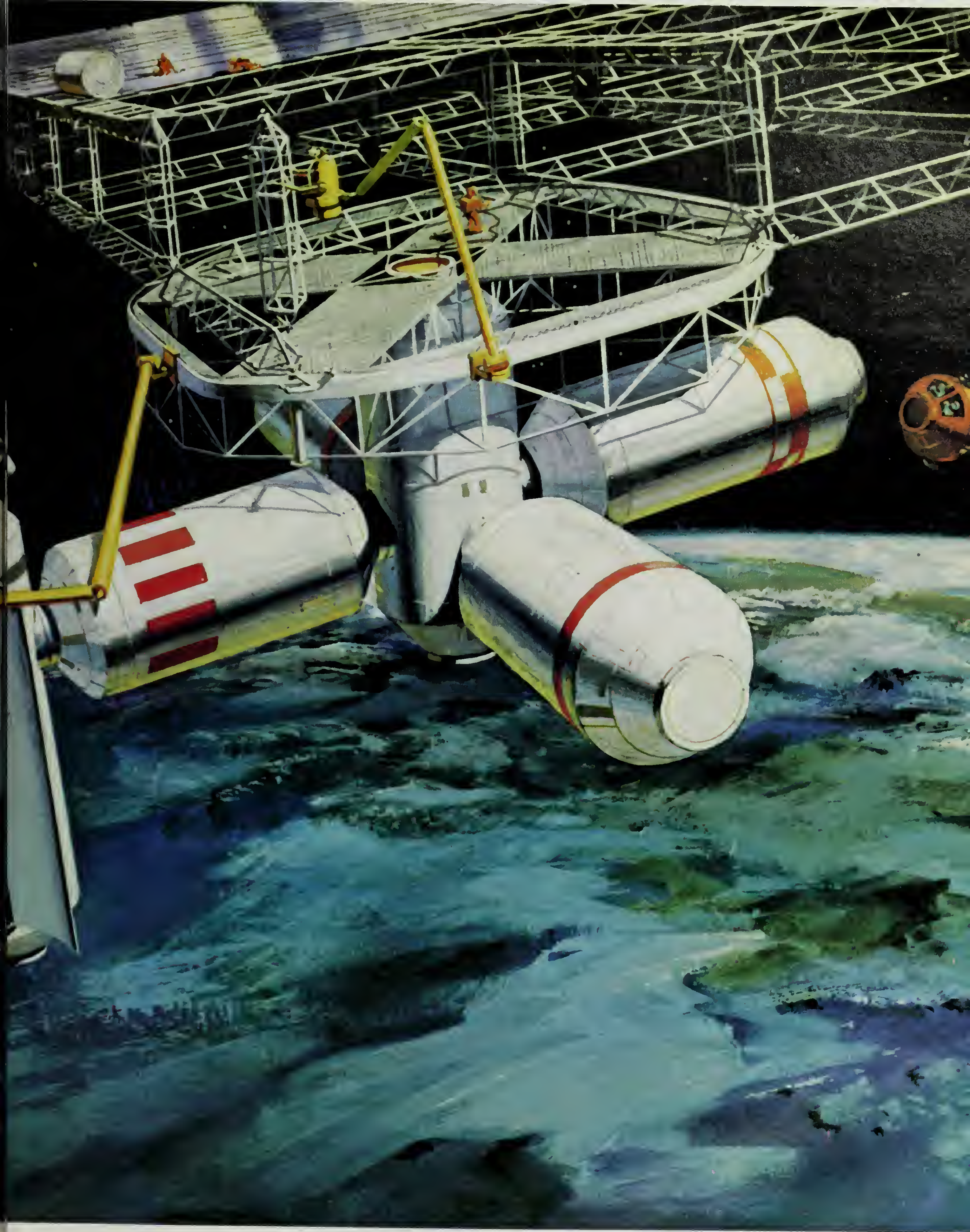
The training that so fascinated Capt. Kerwin is auduous. An astronaut learns a lot more than how to fly a spacecraft. In essence, he goes back to school.

An astronaut-trainee studies basic science and technology courses such as flight mechanics, guidance and navigation, upper atmospheric physics, digital computers, meteorology, astronomy or geology—complete with field trips to areas of geological interest.

Then the trainees are put through a series of simulations to familiarize them with the environment of space. They experience weightlessness, acceleration forces during launch and reentry, and the moon's gravitational pull, all in the relative safety, figuratively, of their own back yard. They are even taught how to survive in the jungle or the desert in case some emergency ever brings the spacecraft down in an unplanned landing area.

In addition, it is the astronaut's responsibility to keep abreast of spacecraft and launch vehicle design and development activities. Not only is he expected to know what is going on, but also to contribute to the engineering design process. The astronauts are also required to maintain their normal flying proficiency in T-38s at nearby Ellington Air

Below: Cockpit interior. Right: Shuttle will service future space stations.



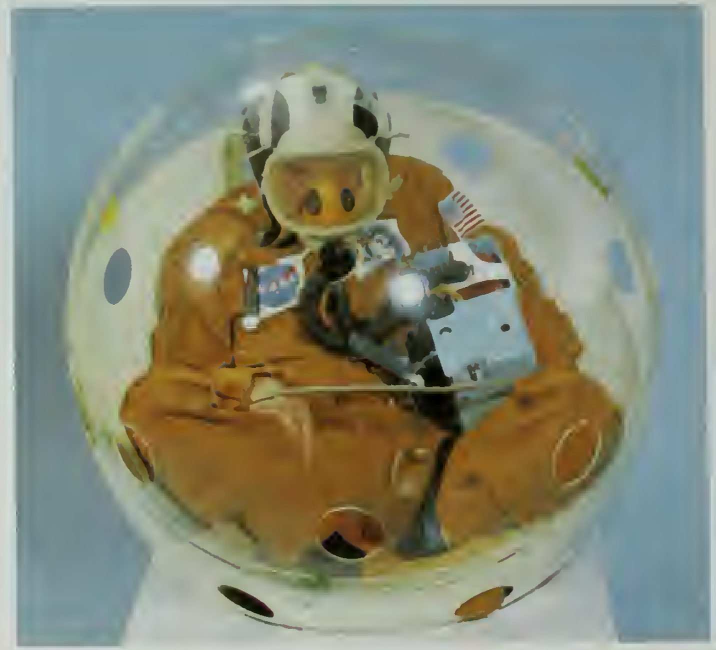
Force Base. Schedules are always hectic; the training never stops.

"With so many breakthroughs and technical advances happening every day," Kerwin explained, "it's a constant learning process. Each mission into space represents years of hard work and planning by a lot of people."

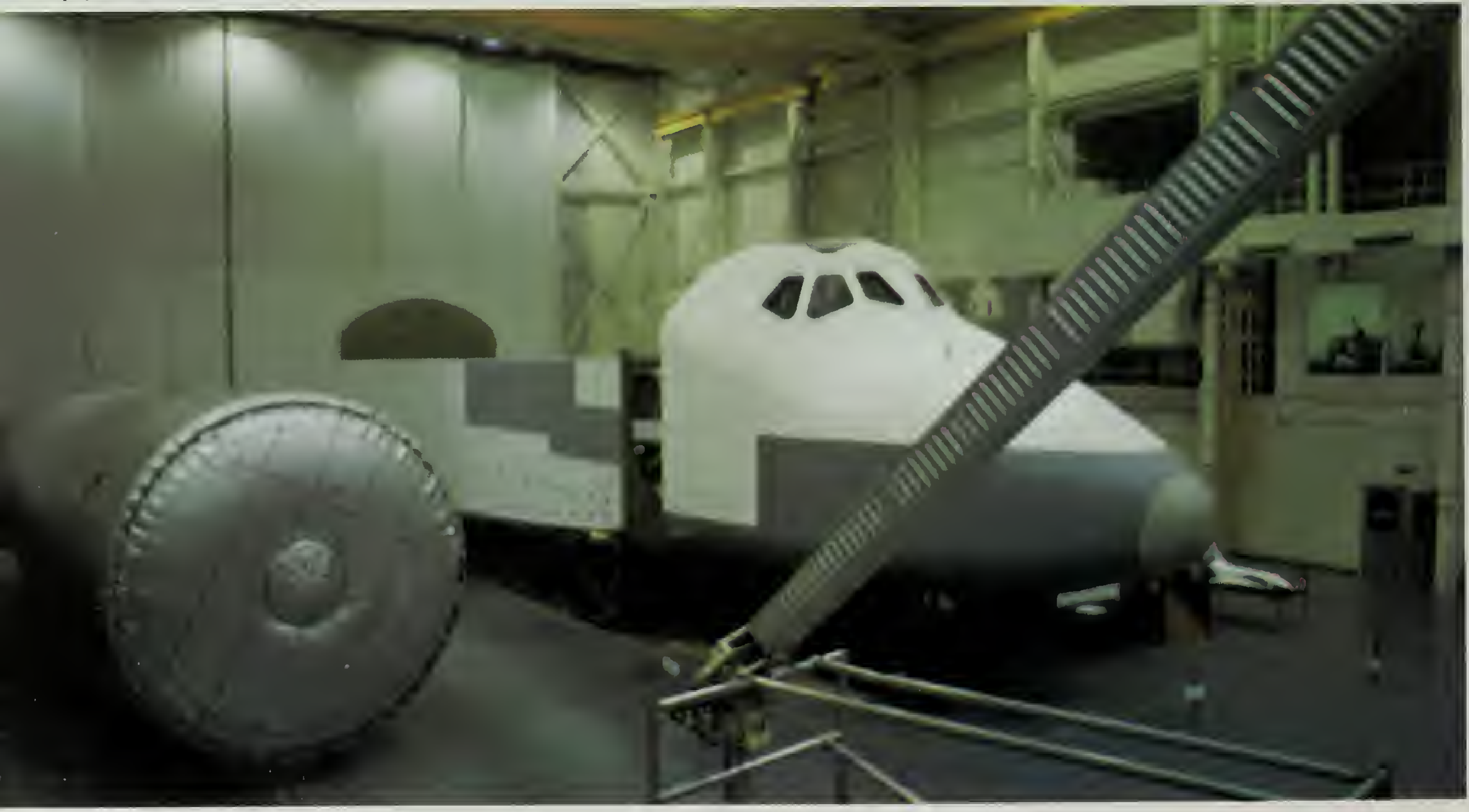
Kerwin should know. He served as scientist-pilot for Skylab 2, which was launched on May 25, 1972, and returned June 22, establishing a new world's record of 672 hours and 49 minutes for a single mission. With him on that mission were two other Navymen (both now retired), Charles Conrad and Paul Weitz. On the back-up crew was another Navyman (still on active duty), Commander Bruce McCandless, II.

CDR McCandless waits patiently for his turn in space. Second in his Academy class of 899 men, he comes from a long line of Navymen—USS *McCandless* (FF 1084) bears his father's and grandfather's names, and USS *Bradley* (FF 1041) was named for his maternal grandfather.

McCandless earned his wings in 1960 and subsequently saw duty aboard USS *Forrestal* (CV 59) and USS *Enterprise* (CVN 65). After serving as an instrument flight instructor at Oceana, Va., he completed his graduate studies in electrical engineering and was selected for the space program.



Top: See-through plastic model of rescue system developed for shuttle; in an emergency, astronaut can fit into rescue ball and (facing page) be transported by another astronaut. Middle: A shoe design being studied for use inside craft. Below: Gray cylindrical objects next to shuttle mock-up are air-filled balloons which simulate, for training purposes, weightlessness of space and bulk of payload.



He is a devoted family man. "Being in a Navy family nearly all of my life—first as dependent and now career officer—adds up to a lot of travel. We never stayed in any place long enough to really establish any roots," McCandless explained. "I've been with the space program for nearly 10 years and when you live in a community for that length of time, you just have to get involved."

McCandless is involved. A large part of that concern deals with saving the environment. To that end, he is a member of the National Audubon Society, and vice president of the local Houston group.

"The Audubon Society is more than watching birds. We are involved in all aspects of wildlife. For instance, we were instrumental in setting up a wildlife reservation not far from here."

McCandless came into the space program on April 4, 1966. Included in that same group of 19 men was a young Navy lieutenant, Thomas K. Mattingly, II.

Mattingly, now a commander, has to be the astronaut's astronaut. John Young, a retired Navyman himself and chief of the astronaut office, says it's nothing for Mattingly to work 12 hours a day.

"This is what I've always wanted to do," Mattingly said. "As a child, I can remember looking up at the moon and wondering what it would be like to stand up there and look up at the earth."

Mattingly got that look at the earth during the Apollo 16 mission when he served as the command module pilot.

He came into the Navy in 1958 and received his wings two years later. He was then assigned to VA-35 and flew A1H aircraft aboard USS *Saratoga* (CV 60). In 1963, he was stationed with VAH-11 deployed aboard USS *Franklin D. Roosevelt* (CV 42). Before reporting for duty with NASA, he was a student at the Air Force Aerospace Research Pilot School.

Completing astronaut training, he was selected to serve as a member of the support crews for Apollo 8 and 11 missions. But his career has not been without its disappointments. He was designated command module pilot for the Apollo 13 mission but after exposure to German measles, was removed from flight status 72 hours before the scheduled launch.

"That had to be the biggest disappointment of my life," he said. "After all those months of planning and working, to have it all disappear because of something as dumb as the measles, well, it was a trying time to say the least. I guess the worst part was that I never did come down with the measles," he laughed.

Currently, Mattingly is involved with developing the operational end of Space Shuttle.

"I'm really excited about the shuttle program. It's going to help solve so many of the problems we face today.

"For example, picture a huge solar energy collector, covering 25 square miles and resembling the framework of a box kite. The collector is in a fixed orbit about the earth, beaming down pure energy in the form of non-polluting microwaves to a receiving station. Sound like the answer to our energy problem?" Mattingly asked. "Experts are already predicting that, with Space Shuttle, such a solar power station could be a reality before the turn of the century.

"It's mindboggling, but with shuttle, we will have the means to do that and more," he said. "We are only limited by our imagination."

Mattingly isn't the only one envisioning a bright future in space. Many American manufacturers see a day when floating space factories will circle the earth.

Past experience has suggested that the gravity-free environment of space has great potential in manufacturing. Biomedical liquids, molten metals and glass take on new characteristics when produced in the absence of gravity. By using the weightless environment, man will be able to produce drugs, metal alloys, electronic crystals and glass lenses that are purer and stronger than those attainable on earth.

For example, one drug used to break up blood clots now costs $1,500 per dose to make. Drug company officials estimate that a manufacturing plant in space could produce that same life-saving dosage for $75.

Other nations will also benefit from shuttle. The European Space Agency (ESA) has agreed to commit almost $500 million to design and build a space laboratory that will fit into shuttle's cargo bay. The spacelab is expected to be a frequent passenger and is designed to be flown as many as 50 times over a 10-year period.

"In essence," Mattingly explained, "NASA has gone into

the trucking business by selling space on flights to private concerns or other governments. The 'rent' they charge will help pay for the cost of the shuttle, making space travel an economical and, perhaps someday, profitable area of exploitation. Economy is the shuttle's major asset."

The Shuttle Transportation System (STS) consists of three basic components, two of which are reuseable.

"Unlike other spacecraft that are discarded after each flight at a loss of millions of dollars," Mattingly explained, "the shuttle can be refurbished and made ready again for launch within two weeks." A single craft will be used for as many as 100 missions into space.

STS includes the shuttle orbiter, a massive tank containing the fuel and oxidant for the orbiter's engines, and two torpedo-shaped booster rockets. To place the shuttle in space, the orbiter is attached, piggy-back fashion, to the fuel tank. The rockets are then attached on either side.

Minutes after launch, using the three main engines on the orbiter and the rocket boosters for thrust, the boosters will drop away—their job finished—parachute back to the ocean for recovery and future use. The fuel tank, the only part of the system not reuseable, is discarded moments before the orbiter enters space.

On a standard mission, the shuttle will remain in orbit anywhere from seven to 30 days, reenter the atmosphere and glide to a landing—just like an airplane—at designated runway strips in California or Florida.

CDR Dick Truly at the controls of a training simulator.

The shuttle can be readied from standby status for a rescue mission launch within 24 hours after notification. For emergency rescues the cabin can accommodate as many as 10 people, so all occupants of a disabled orbiter could be rescued by another shuttle.

Another active-duty Navyman, Commander Richard H. Truly, was among the four men (two 2-man crews) NASA selected for the initial test flights of shuttle. Truly, pilot for the second crew, has been in NASA's astronaut program since September, 1969, and was a member of the support crew for all three Skylab missions.

He completed his naval flight training in 1960 and was assigned to Fighter Squadron 33. Truly served aboard both USS *Intrepid* (CVS 11) and USS *Enterprise* (CVN 65), making over 300 carrier landings. After graduating from the Air Force Aerospace Research Pilot School, he was reassigned there as an instructor.

From November 1965 to September 1969, Truly was assigned to the Air Force as an astronaut in its Manned Orbiting Laboratory Program. When that program was disbanded in 1969, he was assigned to NASA. Truly has been in intensive training in simulators and a modified Gulfstream jet in preparation for manned shuttle approach and landing tests (ALT).

The first manned "free" flights, scheduled for this year, call for Shuttle Orbiter 101, christened "Enterprise," to be carried aloft on top of a modified 747 aircraft, released, and "flown" to an unpowered landing three or four minutes later at Edwards Air Force Base in California. ALT tests will continue until 1979 when the first manned orbiter is scheduled for launch into space.

The fifth astronaut on active duty in the Navy is Commander Robert Crippen who attended the Air Force Research Pilot School, became an instructor, then entered the Manned Orbiting Laboratory at the same time Truly did.

Crippen was a crewmember in the Skylab Medical Experiments Altitude Test (SMEAT)—a 56-day simulation of the Skylab mission. This important test enabled scientists and engineers to collect realistic data and evaluate the equipment, operations and procedures planned for the real mission. Later, he served as part of the astronaut support crew for Skylab 2, 3 and 4 missions and the Apollo-Soyuz Test project, which was completed successfully in 1975.

Like all of the Navy astronauts, Crippen's days are filled with activities and training for the Space Shuttle Program.

"Right now, we're preparing for the new astronaut-candidates expected soon," he said.

Since shuttle will normally carry as many as seven crewmembers and make 60 flights a year by 1985, NASA is preparing for the future by selecting 30 astronaut-candidates —opening the elite astronaut ranks to nonflyers and women for the first time.

"We've already received more than 1,000 requests for information from women and the applications keep coming in," Crippen said.

Shuttle will make space travel possible for those who never could have flown in earlier craft.

"At launch, passengers will feel a maximum gravity load of only three 'Gs', or about a third of that experienced on previous space flights," he explained.

Shuttle seems destined to take the romance and glamour out of space travel. Predicting "routine" operation in the future, NASA has developed "off the rack" spacesuits available in three sizes—small, medium and large.

But if the glamour of space flight is decreasing, so is the expense.

One form of immediate savings is apparent. An important part of many Space Shuttle missions over the next few years will be the placement of costly satellites into earth orbit.

"Today, it costs about $60 million to launch two communication satellites into high orbit and there's no guarantee that they will work once they are up there," explained astronaut Mattingly. "Shuttle could deliver five of those satellites—in guaranteed working condition—for less than half the present cost, about $28 million. What's more, on the way home," he continued, "it could save millions more by recovering a broken satellite and repairing it, or returning it intact to earth for repairs."

As it becomes easier to place them, more sophisticated satellites can be developed. Soon, we will begin to feel the effects in everyday life.

For example, certain sensor systems planned to be placed in space by shuttle are so sensitive that they can identify crops in fields, tell the vigor and probable yield, and even determine initial stages of plant diseases or insect infestation, pinpointing it down to the first affected area. The same system can help conserve our forest resources by locating fires in remote areas before they can get out of control.

Other satellites can track pollution back to its source or identify undiscovered mineral deposits and new sources of fossil fuel. Ocean temperatures can be mapped, allowing experts to predict the movement of schools of fish.

If history is any indication, the 30 new astronaut-selectees coming to NASA will have several Navy people in its ranks—including, perhaps, Navy women and enlisted personnel.

As the designers of shuttle develop new uses for the system, its potential uses will multiply. But the bottom line for the potential of space exploration is the people who must ultimately make the system operate. Navy personnel will continue to fill those ranks, as they have since America's first venture into space. ⚓

WHERE HAVE All OUR SPACE MEN GONE?

Where have they gone? What are they doing? Here's a summary of the current status of those Navymen selected to serve in the astronaut program.

GROUP ONE (Project Mercury astronauts selected April, 1959)

CDR M. Scott Carpenter—Left space program to join the U.S. Navy Sealab Program in 1967; retired from the Navy July, 1969; in private business in California.

CAPT Walter M. Schirra, Jr.—Retired from active duty in 1969; now director of Technology Purchase, with Johns-Manville Corp., Denver, Colo.

RADM Alan B. Shepard, Jr.—Retired from the Navy in 1974; now president of Windward Co., Deer Park, Tex.

GROUP TWO (Test pilot astronauts selected September, 1962)

CAPT John Young—Retired from the Navy 1976. Still in a flight status and serving as Chief, Astronaut Office, Johnson Space Center.

CAPT Charles Conrad, Jr.—Retired February 1974; currently vice president, Marketing, McDonnell Douglas Corp., Denver, Colo.

CAPT James A. Lovell, Jr.—Retired in 1973; currently the president and chief executive officer, Bay-Houston Towing Co., Houston, Tex.

GROUP THREE (Pilot astronauts selected October, 1963)

CAPT Alan L. Bean—Retired from the Navy in 1976; still in a flight status at NASA.

CAPT Eugene Cernan—Retired from the Navy in 1976; he is executive vice president, International, Coral Petroleum Co., Houston, Tex.

CAPT Richard F. Gordon, Jr.—Retired from the Navy 1972; now executive vice president, New Orleans Saints (football), New Orleans, La.

LCDR Roger B. Chaffee—Died in *Apollo* Spacecraft fire Jan. 27, 1967.

GROUP FOUR (Scientist astronauts selected June, 1965)

CAPT Joseph P. Kerwin—Active duty.

GROUP FIVE (Pilot astronauts selected April, 1966)

CAPT Ronald E. Evans—Retired from the Navy but is still in a flight status at NASA.

CDR Thomas K. Mattingly, II—Active duty.

CDR Bruce McCandless, II—Active duty.

CAPT Paul J. Weitz—Retired in 1976; still in flight status at NASA.

LCDR John S. Bull—Withdrew from space program because of pulmonary disorder, July, 1968; now employed with NASA Ames Research Center, Moffett Field, Calif.

CAPT Edgar D. Mitchell—Retired from the Navy in 1972; now president, Edgar D. Mitchell and Associates, Inc., Palm Beach, Fla.

GROUP SIX (Scientist astronauts selected August, 1967)
No Navy Men

GROUP SEVEN (Pilot astronauts—Former Air Force Manned Orbiting Laboratory pilots who entered NASA program in August, 1969)

CDR Robert Crippen—Active duty.

CDR Richard Truly—Active duty.

the COAST GUARD

today

in the tradition of RASMUS MIDGETT

BY JO2 DAN WHEELER

Smuggling was considered a patriotic duty during the American Revolution. Fortunes were made as essential goods slipped past British blockades. By war's end though, smuggling had become a way of life for some even though it no longer benefited the country — in fact, it robbed government coffers of much needed duties.

If the United States was to survive fiscally, smuggling had to be curtailed. Officials easily convinced the people that customs duties instituted by the Congress actually amounted to taxation *with* representation, yet it was not easy to make them understand that smuggling was a crime and smugglers were criminals.

Secretary of the Treasury Alexander Hamilton decided a fleet was necessary to enforce customs laws. He petitioned the Congress to provide for that purpose: ". . . 10 boats — two for the coasts of Massachusetts and New Hampshire; one for Long Island Sound; one for New York; one for the Bay of Delaware; two for the Chesapeake Bay; one for North Carolina; one for Georgia; and one for South Carolina."

Congress agreed. On Aug. 4, 1790, the Coast Guard was born.

At first it was called the Revenue Marine; later, the Revenue Cutter Service; and finally (in 1915) the United States Coast Guard. Despite name changes, the Coast Guard has retained its identity as an organization and, today, it is the oldest of the nation's continuously active seagoing armed forces.

The modern Coast Guard came into being Jan. 28, 1915, with the merger of the Revenue Cutter Service and the Lifesaving Service. The aim of the new service was "to protect life and property from the ravages of the sea."

Though the Guard today still continues to "detect and prevent frauds against revenue," its most visible activity is Search and Rescue (SAR). During fiscal year 1975 alone, the service responded to more than 62,000 calls for assistance and was credited with saving upwards of 3,000 lives. Many times, Guardsmen were forced to put to sea in the worst possible weather literally on a moment's notice. "All I know is the regulations say you have to go out," said one old timer. "They don't say anything about having to come back." Usually though, they do come back with their missions accomplished.

In the early years it was the surfmen who brought distinction to the service. They patrolled the beaches on foot and on horseback constantly searching for smugglers beaching their goods and ships in distress.

Many such Guardsmen made their names legend in the service but none personify the Coast Guard's tradition more than Rasmus Midgett (who was anything but small when it came to courage). In mid-August 1899, the barkentine *Priscilla* was thrown hard aground by 120-knot winds and broken in two just off Cape Hatteras, N.C. Rasmus Midgett, patrolling his strip of beach in hurricane force winds that made it difficult to remain on horseback, spotted barrels, boxes and wreckage being washed ashore. Searching the boiling surf, he spied the wrecked barkentine a half mile off the shore.

Fearing if he rode back to his station for help, the survivors would drown, Midgett headed his horse straight into the ocean toward *Priscilla*. Hailing the embattled sailors to throw themselves into the sea one by one so he could drag them to shore, Midgett pushed his mount close to the wreck and carried seven sailors to safety in as many trips. Three, however, were injured and too weak to even throw themselves within reach. Leaving his exhausted horse ashore, Midgett swam to the wreck three more times and each time returned to the beach with another sailor.

Later, receiving the Gold Lifesaving Medal, Midgett said, "Anyone would have done what I did. It was my job."

Guardsmen no longer patrol the beaches onfoot and horseback, nor do they endure the back-breaking torture of battling their whaleboats in churning surf. Instead, they put to sea in a variety of modern craft to do jobs never before envisioned. And today, it is not just the men who put to sea either. This fall — for the first time in its history — the Coast Guard is allowing women to serve as ship's company aboard cutters with appropriate compartments for their use. Because of legal restrictions forbidding women to serve in combatant ships, women aboard these cutters will be replaced by men during military readiness operations.

Aviation has greatly extended the helping hand of the Coast Guard. Rescue operations that were once restricted to coastal waters because of the limited range of earlier equipment, can now be carried out on the ocean. Giant HC-130 *Hercules* four-engine turbo-prop planes are used for SAR missions far out at sea.

(The Coast Guard has had a hand in aviation from the very beginning. When the Wright brothers made their historic flight at Kitty Hawk in 1903, three members of the nearby Kill Devil Lifeboat Station were on hand. One of them snapped a picture of the plane while it was airborne and, after the flight, when a wind flipped the plane over and threatened to wreck it, all three grabbed it and helped secure it safely.)

Fisheries surveillance now involves more cutters, helicopters and personnel than ever before since the United States — in March — extended its fishery zone out to 200

Left: Coast Guardsmen escort crewmen from a Panamanian freighter which carried about 30 tons of contraband. Below: Some of the marijuana found in the holds of the 325-foot Panamanian freighter M/V Don Emilio.

miles. The Fishery Conservation and Management Act of 1976 gave the U.S. control of about 10 per cent of the world's fisheries resources and gave, as well, the Coast Guard exclusive domain over all foreign fishing within the zone.

Randomly patrolling an area of more than 2.2 million square miles of ocean, Guardsmen and women board and inspect foreign fishing vessels to determine that quotas are not exceeded. They have the power to seize foreign vessels when violations of U.S. law are evident.

USCG spokesmen point out that enforcement of fisheries laws and treaties has been a primary duty of the sea service for generations and new law enforcement endeavors closely parallel previous efforts.

Another challenge constantly facing members is effective control of oil spills. Thanks to a unique "oil fingerprinting" process, developed at the USCG Research and Development Center in Groton, Conn., vessels responsible for oil pollution can be identified through examination of spill samples. The Coast Guard uses a combination of four different analyses to bring out the unique chemical traits of the samples. By comparing these with oil residue still in tankers' holds, officials are able to pinpoint with 99 per cent accuracy who the culprit is in any unreported oil spill.

For instance, in July 1975, a 40,000-gallon oil slick washed ashore in the Florida Keys, fouling miles of coastline and threatening the undersea environment. By the time the spill had washed ashore, hundreds of miles separated the offender from his misdeed. He seemed virtually assured of anonymity.

Immediately the Coast Guard began investigative work. Each of the 247 vessels which had passed through the Florida Straits at the approximate time of the spill was boarded. Coast Guard personnel interviewed members of each crew and took oil samples from suspect vessels. Samples were sent to the USCG research center and compared with samples taken from the spill.

After exhaustive lab work, the Coast Guard identified the polluter, arrested the vessel's Master and charged him with failure to notify proper authorities of the spill, an offense punishable by a $10,000 fine and a year's imprisonment.

Not all Coast Guard jobs involving spills take the form of Sherlock Holmes' work. Much of it is done by the USCG Strike Force which is tasked with control and clean-up of oil spills resulting from marine accidents.

The Strike Force is divided into three 20-man teams specially trained to fight spills. Since its beginning in 1973, these team men have fought hundreds of spills while repeatedly risking their lives to rescue crews, save sinking ships, salvage oil still in holds, contain spills and clean up polluted areas.

Perhaps the most famous case in which Strike Force members were involved recently was the grounding of the Liberian tanker *Argo Merchant*. The tanker ran hard aground 25 miles southeast of Nantucket Island, Mass. while carrying 7.5-million gallons of heating oil. In 20-knot winds and heavy seas, Strike Force members boarded the stricken vessel by helicopter to rescue crew members and tried to prevent the tanker from breaking up and dumping its thick cargo. "That was one situation that got the best of us because of the weather," said Lieutenant Commander Barry Chambers, the Atlantic Strike Team's officer-in-charge. "Unfortunately, it also received most of the publicity."

Most strike team missions are considered successes,

Left: The Coast Guard Cutter Sherman *approaches an iceberg in the Northwest Atlantic. Reports from the C-130 help predict the movements and positions of icebergs. Below: A Coast Guard scientist takes a core out of the ice to determine temperature, salinity, thickness and strength of the ice.*

however. During the month following the *Argo* wreck, the Atlantic Team alone worked on five other spills including the grounding of the Liberian tanker *Olympic Games* in the Delaware River near Philadelphia, and others in the Great Lakes, Buzzards Bay, Hudson River and Chesapeake Bay.

After each spill incident, Coast Guard members immediately began clean-up operations using sophisticated oil skimming equipment. "Everything eventually evolves to the guy with the hose and vacuum tank sucking up the oil," said one Coast Guardsman. "Then it comes down to a shovel and rake on the beach."

A cleaner, but no less important job, is done by the Coast Guard's International Ice Patrol, in existence since 1914 following the loss of the *Titanic.* Their primary job is tracking icebergs that drift into major North Atlantic shipping lanes and present navigational hazards. During the ice season — February through August — the area is blanketed with fog and every year an average of 400 bergs drift southward toward the busiest steamer lanes in the world.

In an area about the size of Pennsylvania it is not inconceivable that one or more icebergs occasionally slip by unobserved into shipping lanes despite the most up-to-date detection equipment used by ice patrol cutters and C-130 aircraft. Yet, in all the time the Coast Guard has charted icebergs, no ship has been lost through collision with an iceberg. (Operations were suspended during the two World Wars and in March 1943 a British ship hit a berg. Before she sank, however, 145 persons aboard her were rescued by Coast Guard and other craft.)

In addition to tracking icebergs, the Coast Guard also cracks the ice to provide sea lanes during the winter months. For example, 12 cutters provide icebreaking services on the Great Lakes during the winter. Great Lakes' routes used to be closed to shipping during the cold months, but, due to extended USCG efforts, year-round navigation was accomplished on the upper four lakes during the past two years. In 1976 alone, $975 million worth of cargo safely reached destinations thanks to USCG icebreaking forces.

Working hand-in-hand with the Drug Enforcement Administration and the U.S. Custom Service, the Coast Guard helps stop illegal drugs from reaching our shores. During 1976, the Guard seized 25 vessels and confiscated tons of narcotics valued at more than $133 million.

In one incident this past October, the high endurance cutter *Sherman,* working closely with the Panamanian government, intercepted the 225-foot Panamanian-flag freighter *Don Emelio* east of the Bahamas. Finding narcotics on board — 35 tons of marijuana and 86 pounds of hashish, worth $20 million — the cutter took the vessel in tow to Miami where it was turned over to the Customs Service.

Perhaps the best known of Coast Guard functions involves boating and marine safety. Few are the pleasure boaters who have not come in contact with a member of the Coast Guard Auxiliary, an organization of 47,000 civilian volunteers dedicated to the promotion of recreational boating safety. The Coast Guard, per se, is also deeply involved in the promotion of boating safety.

In 1976, the USCG developed the most comprehensive regulatory package of safety standards ever devised for recreational boats. New safety standards for fuel and electrical systems, and level flotation are expected to prevent an estimated 210 deaths annually. Additionally, the Guard's Office of Boating Safety continues to educate the public about recreational boating through a program of public service announcements on television, radio and in the

Top: A snare is used to soak up oil. Snares are fibrous "mops" (one hangs here from a pitchfork) which can absorb up to 40 times their weight in oil. Above: USCGC Vigilant *arrives to stand by the grounded SS* Argo Merchant. *Right: A Coast Guard woman cadet receives practical seamanship training aboard the barque USCGC* Eagle.

printed media.

Not concerned with recreational boating alone, the Coast Guard's Commercial Vessel Safety Program was designed to prevent accidents on the high seas. The Office of Merchant Marine Safety is closely associated with nearly every phase of the life of an American ship from the first plans on the drafting board to the final trip to the scrap heap. Even on smaller vessels not subject to intensive inspection, certain laws and regulations requiring safety equipment, identification numbering, safety procedures, and manning by qualified crews are administered and enforced by the Guard.

Among the duties which the Coast Guard performs on merchant ships are thorough, periodic inspections of hulls, machinery and equipment to ensure seaworthiness and compliance with safety regulations; the approval of plans before construction or conversion of merchant vessels; and an extensive first inspection of all new vessels during construction to make sure they are built in compliance with the approved plans.

Obviously, despite its name, the 38,000-member Coast Guard is involved in much more than guarding our nation's coasts. Search and rescue, fighting crime on the high seas, prevention and clean-up of oil pollution, and protection of fishing grounds are among its many missions. Although it performs myriad peacetime duties, the Guard doesn't neglect its military readiness responsibilities. As a member of the Armed Forces, the Coast Guard works closely with the Navy in training to meet fleet performance standards and strongly emphasizes refresher training for crews of USCG high endurance cutters.

Admiral Owen W. Siler, Coast Guard Commandant, sums it all up by saying, "Our organization functions effectively because it has always operated on a multimission concept. While we have many professional specialities, we are essentially generalists, trained in many skills and ready to serve in many roles.

"We see 'Semper Paratus' (Always Ready) as more than a motto; to us, it's a way of life." ⚓

grand old lady o

BY JO2 DAN WHEELER

USCGC *Sundew* (WLB 404) is the hardest worker in Charlevoix, Mich.

When the snow whips down from the north causing freighters to inch their way through the slush on Lake Michigan, Charlevoix closes shop and snuggles up till spring. *Sundew,* though, prepares for her busy season.

The waters inevitably change to ice and seagoing giants cease to make headway. It's then that the grand old lady of Charlevoix turns to, just as she has each winter for more than three decades.

"Sundew is the most powerful seagoing, icebreaking buoy tender in the Coast Guard," said her commanding officer, Lieutenant Commander J. V. O'Neill, USCG. "Her supercharged engines enable her to handle icebreaking duties in the Strait of Macinac, a waterway that sees a lot of commercial traffic and a lot of ice."

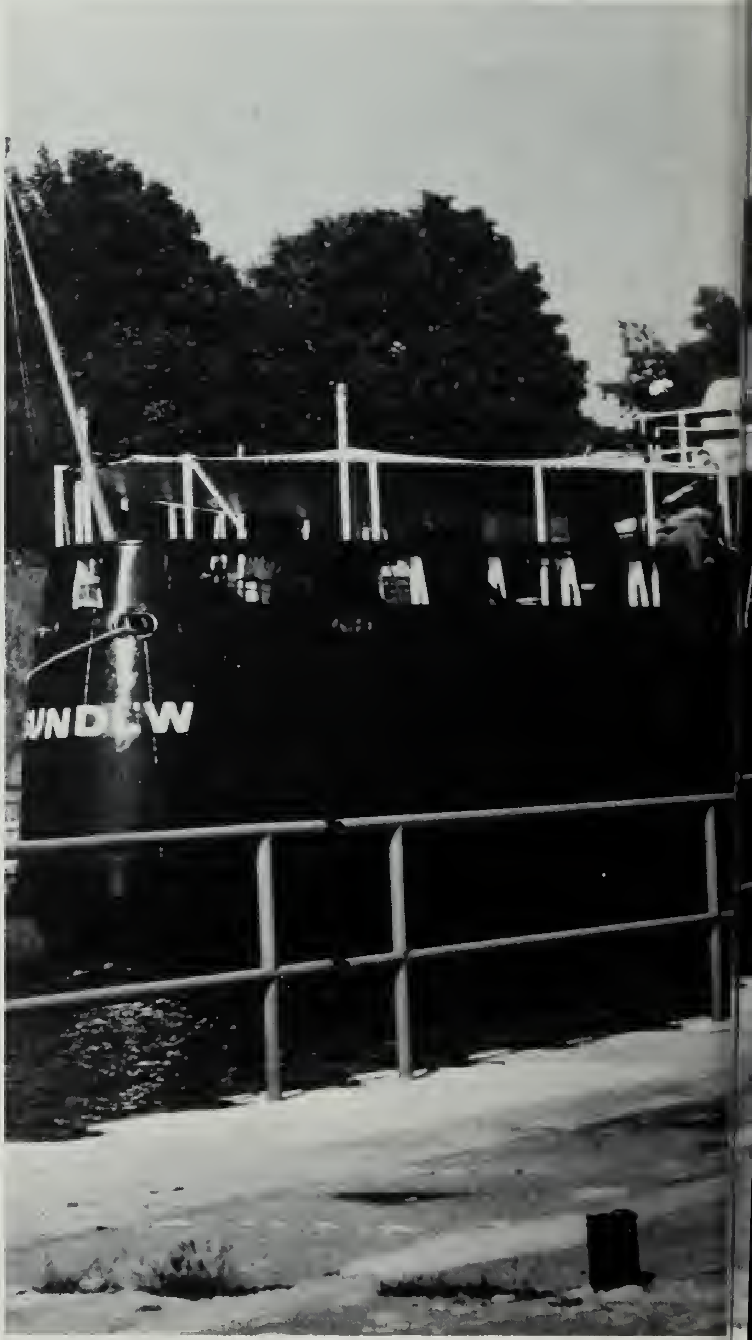
Built in wartime (1944), *Sundew* today is responsible for maintaining aids to navigation and providing logistics support for lighthouses in an operating area which includes northern Lake Michigan, northern Lake Huron and part of the St. Mary's River. She regularly steams the other lakes when needed. Though her main job is tending buoys, *Sundew* is tasked with considerable icebreaking duties.

"This past winter, we left Charlevoix on November 28 to work buoys on Erie and Ontario," LCDR O'Neill said. "We saw our first ice two days later, and by December it was forming so rapidly that ice breaking assistance was necessary a full month earlier than in previous years."

It was a hard winter for this buoy tender which tied up in her homeport for only 10 days during that three-month tour; she saw her last icebreaking mission in late April. Traditionally, navigation on the lakes ceases in December and doesn't resume until spring. For the last four years, however, the Coast Guard has devoted its icebreaking capabilities to testing the feasibility of year 'round navigation on the Great Lakes.

"The commercial ships trying to transit the lakes go as far as they can under their own power," the captain said. "Then, they call for Coast Guard assistance. That's when we go to work."

Depending on the weather, the ice-breaking buoy tender breaks a path through the ice for a commercial carrier in one of two ways. If the weather is fair, *Sundew* overtakes the vessel and ploughs a path through the ice for the commercial carrier to follow. If there are strong winds which draw the ice back together as fast as it is broken, *Sundew* steams ahead of the carrier, opens a craggy channel, and then drops back downwind, alongside, to prevent the ice from closing.



"Sometimes," LCDR O'Neill said, "we go for days like this—one giant step forward three steps back, making only a mile or two in as many days."

In such operations, *Sundew's* bridge personnel do most of the work directly involved with icebreaking while the remainder of the 47-man crew performs interior maintenance. "During the winter months, we get the inside painted and

Charlevoix

most of our maintenance completed. Most of the men seem to be along for the ride since there is so little for them to do directly related to the ship's mission. It's hard on them to be underway and have time on their hands, so I usually leave about one-third of the crew ashore. During the winter I can operate with two-thirds of my crew," the captain said.

Once the last icebreaking assignment is completed and the thaw has set in, all of the crew is necessary. "Immediately, we begin the job of replacing the buoys which had to be removed for the winter," the captain said. "I have 99 buoys to tend. The winter hit us so severely and so early last year that we lost hundreds of thousands of dollars worth of navigation aids and actually found several of our buoys 30 to 40 miles off station."

Once the initial tending is completed in the spring—a job requiring about four weeks of continuous work—*Sundew* returns to Charlevoix for "some rest and relaxation." The men can use the stand down after a winter on the Great Lakes, but the grand old lady has done her share of suffering as well.

"By the time spring arrives the exterior is pretty ratty," said LCDR O'Neill. So spring is also a time for chipping, scraping and painting *Sundew's* skin. But it's not all work and no play; there really is time for relaxation.

During the winter, Charlevoix's few permanent residents thrive on skiing, sledding, hunting and ice fishing or movie watching on weekends. But come summer, the 3,000-person population blossoms into 30,000 tourists and summer residents. "It's not the same place," the captain said.

Each season, the buoy tender holds open house every weekend to the delight of literally thousands of visitors who come aboard. Practically every crewmember and his family is involved in community projects and activities, and the ship participates in community affairs. *Sundew* serves as a platform for the queen of the annual summer festival and also anchors out with all lights blazing to illuminate the town's yearly boat parade called Venetian Night.

This summer will be *Sundew's* last in Charlevoix for a while if all goes as scheduled. Though she has served faithfully for 33 years and has never left the Great Lakes (she was built in Duluth, Minn.), the ship is going to the yards for a facelift.

When she leaves the yards, she'll be a new woman. Her open-bay berthing area with racks stacked three high will be replaced with three-man cubicles, and air-conditioning will be installed. Some hull work and engineering improvements will be the finishing touches expected to add another 15 years to her life before she finally retires.

LCDR O'Neill, for one, will be sorry when that retirement ceremony is held. "It would cost millions to duplicate this ship today," he said, "and she cost less than a million to build. She's not a 'drag racer' like some of the newer cutters, but she is a hardworker that can go anywhere and she's seaworthy as hell.

"The Coast Guard has a real winner with *Sundew*." ⚓

Mail Buoy

Command at Sea

SIR: Several officers assigned to my unit have had numerous discussions concerning eligibility for command at sea and authority in a boat.

It appears that ambiguity exists in the reference material. Specifically, (1) In article 0865 of Navy Regulations, it says officers of the line designated for limited duty may succeed to command provided they are authorized to perform all deck duties afloat. What or who determines if a limited duty officer is authorized to perform all deck duties afloat? Does he have to be a qualified Officer of the Deck underway?

(2) Article 0825 of Navy Regulations says the senior line officer eligible for command at sea has authority over all persons embarked therein, and is responsible for the safety and management of the boat. Does this mean that a young ensign (surface warfare type fresh out of OCS) has authority over an LDO Lieutenant (6351)? Over a Lieutenant (1130—qualified in special warfare)?

(3) Does a junior line lieutenant (1130—qualified in special warfare) have authority over a senior line LDO (6351)? Or does the ensign (surface warfare) have authority over both? What if you had a junior line lieutenant (surface warfare), would he have authority over both the more senior line lieutenant (1130) and the senior line LDO (6351)?

(4) In a command in which an executive officer is not detailed, who could legally perform the duties of the XO? A senior lieutenant line LDO (6351) or a junior line lieutenant (1130) or an even more junior line lieutenant (surface warfare)?—name withheld by request.

- *Whew! It took a bit of work to come up with the answers to this multi-question question, but here goes:*

In response to question 1, BuPersMan, 1820320.1.a(2), says, in part, ". . . a line LDO attached to and serving in a ship shall be designated as eligible to succeed to command at sea by the first commanding officer who authorizes him to perform all deck duties afloat." Such duties are interpreted as including duties as officer of the deck underway.

In response to questions 2 and 3, Article 0825, U. S. Navy Regulations, 1973, is interpreted as indicating that, when embarked in a boat not having an officer or petty officer in charge, the unrestricted line ensign (surface warfare) would have authority over the LDO lieutenant who has not been designated as eligible for succession to command at sea, but not over the unrestricted line lieutenant (special warfare); if the unrestricted line lieutenant (special warfare) were embarked, he would have authority over both.

It is assumed that question 4 relates to the detail of an executive officer of a unit or activity for which eligibility for command at sea is a requisite for succession to command. In such case, if no executive officer is detailed by the Chief of Naval Personnel, Article 0843, U. S. Navy Regulations, 1973, is interpreted as indicating that the commanding officer, must detail the unrestricted line lieutenant (special warfare) as executive officer, rather than the more junior unrestricted line lieutenant (surface warfare). The more senior LDO lieutenant would be eligible for detail as executive officer only if he has been designated as eligible for succession to command at sea, in which case he would take precedence over the two unrestricted line lieutenants for detail as XO.—ED.

Sideburns

Below are some of our readers' reactions to the retouched photo of three chiefs promoted to warrant officer which ALL HANDS published in the April issue. Space limitations prohibit our publishing the letters in their entirety:

SIR: The three W-2s pictured in NAVY TIMES do not meet the Navy grooming standards and the W-2 in the center displays no devices on his hat. In ALL HANDS, the pork-chop sideburns and the Fu-Manchu beard were eliminated. If your staff on ALL HANDS was responsible for the alteration of the photograph to assure the W-2s conformed to Navy Uniform Regulations, I consider that action devious, untrustworthy and a direct misrepresentation of the truth. It is bad enough to have the Commanding Officer of that ship allow his senior supervisory personnel to maintain such poor standards, but I consider it even worse to alter the facts. — CAPT H. A. Taylor

SIR: I'm sorry to report that your standing has gone down in my book, and it will take some time for me to put my entire trust in ALL HANDS magazine again. — ABCM J. Schulman

SIR: Congratulations, ALL HANDS, for giving these sterling examples their much needed haircuts. I can only wonder about the leaders who recommended them for warrant. Perhaps now that they are warrant officers they will follow the appearance guidelines shown by ALL HANDS in retouching their photo before printing it. — CWO3 K. W. Allen

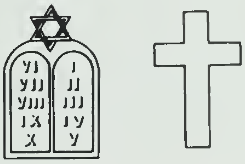
- *Our thanks to all of you for your letters. Oftentimes, the photography accompanying releases sent to ALL HANDS is not of the quality required for reproduction in our magazine. High quality people pictures are especially difficult to take, occasionally making it necessary to re-crop, clean up and even retouch photography before publication. We assure our readers that retouched pictures, such as the one of the chiefs-made-warrants, will not be published in ALL HANDS in the future.*

In addition to the quality of photography ALL HANDS receives, there is the problem that many subjects in Navy photos do not adhere to uniform regulations or grooming standards. It is a difficult situation. If we publish the photo, we're criticized by the majority of commanding officers who uphold these standards. If we don't, then many articles die owing to lack of graphic support . . . and we've failed to use stories we've solicited from fleet units.

Our action was not motivated by a conscious effort to distort or mislead our readers. — ED.

Stern Shots

What do three oak leaves, an acorn, a cross, and a "mill rinde" have in common? Right! They're all part of officers' staff corps sleeve devices. They correspond to the line officer's star device, answer (J), below. How many can you name correctly?



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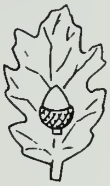

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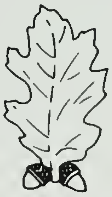

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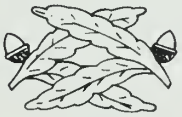

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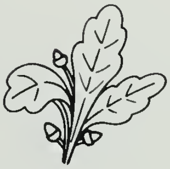

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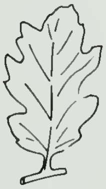

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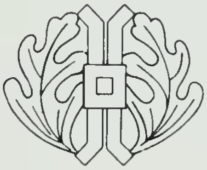

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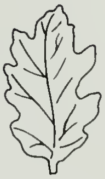

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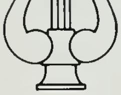

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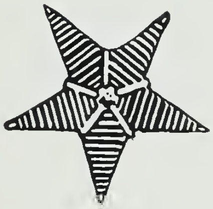

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Answers: A—Chaplain Corps; B—Medical Corps; C—Dental Corps; D—Civil Engineer Corps; E—Supply Corps; F—Medical Service Corps; G—Judge Advocate General's Corps; H—Nurse Corps; I—Leader, U. S. Navy Band; Leader, U. S. Naval Academy Band and Commissioned Status in the field of Music; J—Line.

THE NAVY IN SPACE

ALL HANDS

SEPTEMBER 1977

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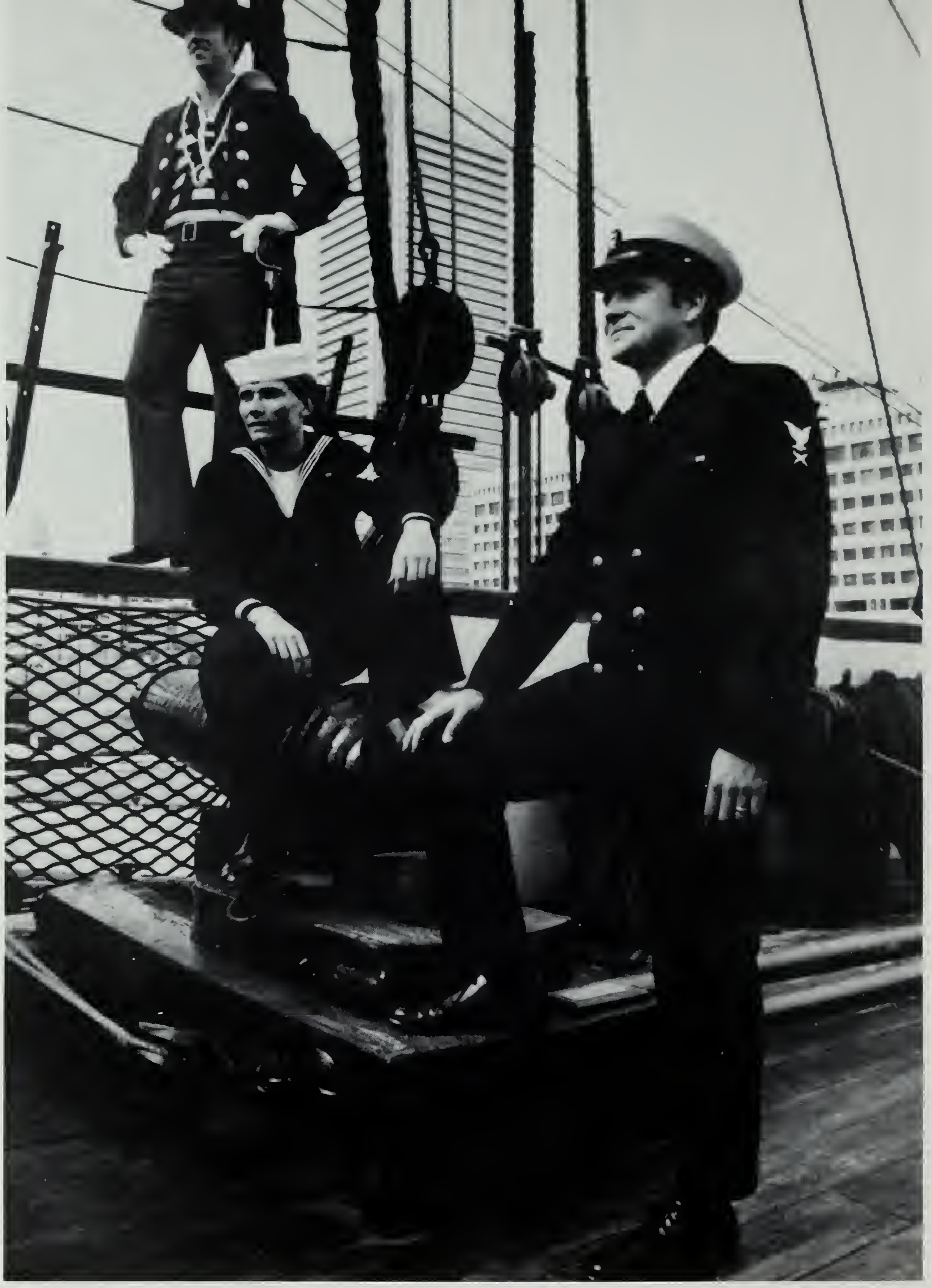

These sailors aboard USS Constellation *in Baltimore harbor show that tradition is never dead—it merely rests, waiting to be called upon. And called it was, with the recent decision made by CNO to return enlisted men—E-1 thru E-4 to the bell-bottom uniform. For more on this uniform change see page 18.*

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ALL HANDS

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Covers

Front cover: A member of Queen Elizabeth II's Royal Horse Guard stands watch in London. (Photo by PH2 Dwain Patton)

Back cover: Navy Recruiting Command, Arlington, Va., produced the back cover of Mariano G. Vallejo, an American hero-statesman of Spanish descent, for use during this year's National Hispanic Heritage Week celebration. Vallejo was born in Mexico in what is now Monterey, Calif. He rose to become Mexico's *Commandante General* and Director of Colonization of the Northern Frontier, but broke with Mexico to support California's struggle for annexation to the United States. California named the city Vallejo after him and the Navy named USS *Mariano G. Vallejo* (SSBN-658) in his honor in 1966.

Currents

Navy To Mark 202nd Birthday ● The U.S. Navy will celebrate its 202nd Birthday on Thursday, Oct. 13, 1977. On that date in 1775, the Continental Congress authorized the fitting out of ships for the infant Continental Navy. A Navywide celebration is again planned this year in order to engender a greater appreciation of our Navy heritage and to renew our sense of pride in the accomplishments of the entire service – active and retired, regular and reserve, uniformed and civilian. This year's observance will be limited to an internal commemoration. October 13 has also been designated Navy Uniform Day when all Navy personnel, including active duty, reserve, NROTC, NJROTC, Sea Cadets and retired members, are encouraged to wear the uniform, preferably service dress blue. This observance will allow the American public to see the extent of the U.S. Navy's impact in terms of the great number and occupational variety of Americans who are Navy members. The weekend of 15-16 October is designated Navy Sabbath weekend when all Navy and Marine Corps personnel are encouraged to wear their uniforms while attending Navy Sabbath services.

Microwave Landing System Test Successful ● An F-4J Phantom has made the first landing by a high performance Navy plane using a new Microwave Landing System (MLS). The system is capable of reaching out electronically and flying an airplane down to a safe landing without the pilot having to touch the controls. The F-4, from the Naval Air Test Center (NATC) at Patuxent River, Md., landed at the Federal Aviation Administration's Test Center in New Jersey. NATC is testing the system to ensure it will be able to meet the unique requirements of Navy carrier-based aircraft. The system is the result of an international effort to provide aircraft with the capability of landing anywhere in the world in any kind of weather. The MLS can fly a plane in a variety of patterns and offer pilots a selection of approaches.

Petty Officer Quality Control Review Board Reports Its Findings ● The Petty Officer Quality Control Review Board recently completed the review of 145,000 first and second class petty officers and has recommended administrative action to be taken in the cases of 1,498 members identified as substandard performers. Recommended administrative actions include two administrative separations, 100 reductions in rate and 17 transfers to the Fleet Reserve. Warning letters citing substandard performance were issued to 1,151 petty officers, 819 of which contained reenlistment restrictions requiring specific approval from the Chief of Naval Personnel for reenlistment or extension of enlistment. The Board referred 186 individuals to the Enlisted Alcohol Review Board and advised 320 to pursue actively a weight reduction program or be subject to a convenience of the government discharge. For failure to comply with the Navy policy on equal opportunity, 36 members were referred to the Human Resource Management section in BuPers. Sixty-two letters noting significantly improved performance were issued to individuals who received warning letters last year.

New Fleet Readiness Squadron Is Established ● The Atlantic Fleet F-4/F-14 Fleet Readiness Squadron Training Program at NAS Oceana, Va., was expanded when VF-171 was commissioned in August as the new F-4 Fleet Readiness Squadron. Previously, training for F-4 and F-14 aircraft was conducted by VF-101. VF-101 will continue to operate as the Fleet Readiness Squadron for F-14 aircraft.

Veterans Administration Hospitals To Use Satellite Communication ● The Veterans Administration (VA) will begin an experimental 15-month program to use space satellites for biomedical communications between 31 VA hospitals and as many as 10 other medical institutions in 11 Western states. Emphasis will be on two-way video transmissions linking hospitals and medical teaching centers. Television monitors within the hospitals will permit viewing by staff members. They will be able to pose questions or solicit comments from other broadcast participants using telephone conference lines. Broadcasts will cover a wide range of clinical problems and educational presentations. This will be the second phase of a VA program to enhance medical education and consultation in remotely located hospitals through the use of satellites as communications links.

Variable Reenlistment Bonus (VRB) Claims Procedures Announced ● Eligibility criteria and claims procedures for personnel entitled to payments as a result of the June 1977 U.S. Supreme Court Decision on the Variable Reenlistment Bonus (VRB) Program were announced by NavOp message (089-77). The Supreme Count, in a decision referred to as the Larinoff Case, ruled that regular Navy enlisted personnel who agreed to extend their enlistments under the VRB Program are entitled to bonus payments despite changes in the bonus levels and the eligible ratings list, as well as the subsequent cancellation of the VRB Program in June 1974. The recent NavOp message details the two general categories of VRB entitlement for both current and former Navy personnel. It also details specific criteria that eligible personnel must meet in order to claim their VRB money. All active duty personnel who meet basic VRB eligibility criteria, and who are not named plaintiffs in existing VRB legal actions, are requested to submit a letter, via their commanding officer, to the VRB claims section of the Bureau of Naval Personnel. Individuals who have been separated from active service are asked to submit a letter to the same BuPers section to request an official application form. BuPers emphasizes that all personnel with valid VRB claims will be paid as rapidly as possible.

3 For 3 Rotation Approved for Most CPOs ● Effective Oct. 1, 1977, the maximum 36-month sea tour/minimum 36-month shore tour policy for chief petty officers (E7-E9) has been extended to all ratings except CT, UDT/SEAL, and women CPOs. Members must complete 19 years of active duty service (not including constructive time) by the end of the third year of their current tour to be eligible. Until now, only selected ratings were included in the program which started in June 1977 on a trial basis. Navy women are not included in the program because of their current overseas tour length requirements. The CT community will have a one-for-one OUTUS/CONUS policy for CPOs meeting the above criteria. Present UDT/SEAL community SEA/SHORE tours must remain in effect due to the large number of sea duty billets.

Dr. Louis Gebhard

“GOING LIKE SIXTY” AT 81

BY JO2 DAN WHEELER

Louis A. Gebhard wasn’t satisfied just “doing his 20 years and getting out of the Navy.” So he did another 20.

Then another.

And now he is working on his fourth.

A pioneer in the development of radio broadcasting, radar and electronics, and holder of 90 patents, Dr. Gebhard has devoted more than 60 of his 81 years to Navy research. Currently serving as an electronics consultant to the Naval Research Laboratory in Washington, D.C., the scientist was superintendent of the lab’s Radio Division for more than two decades after World War II.

“Of course, we don’t say ‘radio’ anymore. Today we use the term ‘electronics,’ ” Dr. Gebhard said.

“ ‘Radio’ came into use around 1910 in place of the word ‘wireless’ and now people rarely think of radio in a broad sense. Actually, radio is not just a small branch of electronics—it is the father of the science.”

Gebhard’s career in radio began while a teenager in Buffalo, N.Y., when radio was an esoteric infant. “I had been interested in radio for some time though I was still a high school student,” he said. “In fact, I think I was more interested in radio than in studying. At any rate, I was building and collecting Marconi equipment when the new law went into effect requiring all operators to have a commercial experimenter’s license. I believe I was one of the very first to get one.”

When World War I began, Gebhard joined the Navy and was shipped off to Great Lakes for basic training. Since the Navy needed “wireless operators” with licenses, Gebhard was immediately placed under the tutelage of Dr. A. Hoyte Taylor, district communications superintendent for the Great Lakes Naval District. “I was assigned to his new research lab,” recalled Gebhard. “Right then and there, I started my career in radio research.”

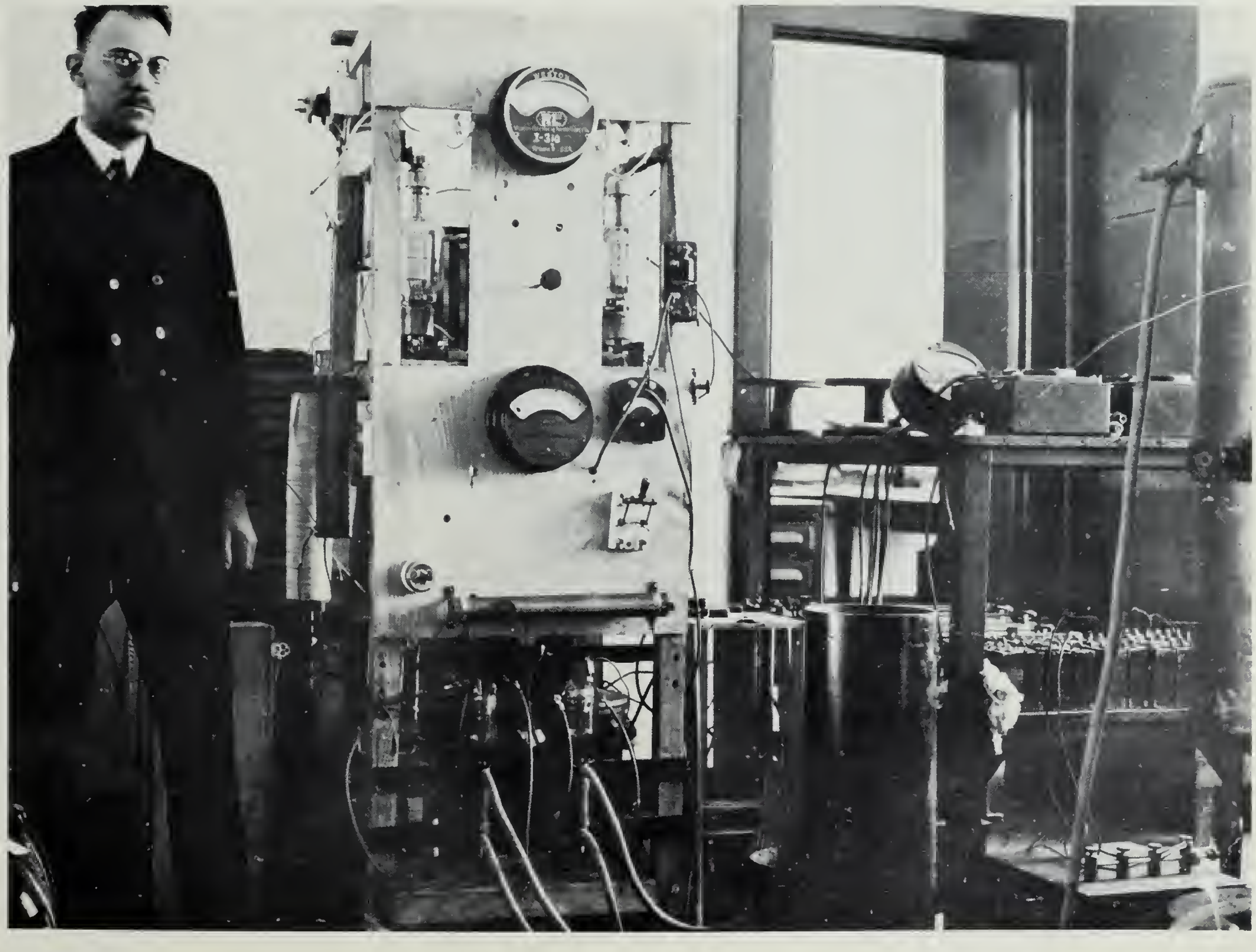
Dr. Taylor, as one of the nation’s leading scientists, was appointed head of the then-forming Trans-Atlantic Radio Communications System with headquarters at Belmar, N.J. The new system was used as an alternate means of radio communications to Europe since the trans-Atlantic cables were threatened to be cut by the Germans. Dr. Gebhard was assigned research work to improve the radio system under Dr. Taylor.

Dr. Gebhard stands at one of the first high-power, high-frequency sets.

"At Belmar, we tried to improve reception equipment so we could rely on it during the war. By this time the Navy had been ordered to take control of all Marconi stations in the nation with the exception of Army field stations. Tasked with this responsibility, the Navy became a pioneer in electronics development and research. There are many things the Navy has done in radio which few people recognize . . . like inventing the first American radar."

According to Gebhard, radar was developed by scientists working at the Naval Research Laboratory years before the British developed theirs, though the British are usually given credit for the invention. However, that project didn't start until after Gebhard left the Navy. "The best I made was chief petty officer. You know, they moved you up pretty fast back then, at least during the war. When I left active duty in 1919, I became a civilian laboratorian under then-Commander Taylor," said Gebhard.

Subsequently, he was transferred to the experimental lab at the Naval Air Station Anacostia, Washington, D.C. There Gebhard was involved in research with electromagnetic waves at high frequencies and consequently was broadcasting signals to sets operated by amateurs around the country. Amateur operators were asked by the Navy to report to NRL (as it is called today) the time, place and quality of reception. These experiments eventually led to the installation of radios in aircraft for air-to-ground communications as well as



"GOING LIKE SIXTY" AT 81

communication links with remote areas of the earth. But there were other benefits.

"This operation actually evolved into the start of radio broadcasting as we know it today," said Gebhard. "Eventually, some of the local amateurs gave us discs (phonograph records) to play on the air so it would be easier for them to detect our signals. We played them . . . that put us in the broadcasting business. Soon, we began airing singers and instrumentalists—I think I was one of the first, if not the first, to ever play the violin over the air."

That was around 1920. Station KDKA Pittsburgh was the first to broadcast national election returns and soon entertainment aspects of radio began to catch on. Consequently, the Navy station broadcast Navy Band and Marine Corps Band concerts, weather information and nationwide time signals. Soon various government officials recognized radio's potential for getting public service messages to the people and asked for air time.

"We let the head of the public health talk on our station. He spoke about venereal disease publicly back when 'decent' folks only whispered the word," said Gebhard. "Boy! That was really criticized by the newspapers."

Probably the most historical broadcast made on the Navy's station came in 1922 when President Warren G. Harding dedicated the Lincoln Memorial and the sea service aired his speech live—the first time any president was ever carried on the air. Eventually, Dr. Gebhard moved on to other projects and the broadcast business was turned over to budding professionls to be developed to its potential.

The Naval Research Lab had not yet been established and Navy scientists were scattered throughout the country. High officials pushed for centralization. During World War I,

Thomas A. Edison was asked to head a consulting board to examine the possibility of developing a centralized lab where Navy research could grow to its technological potential. Edison became a major and outspoken proponent of an experimental military lab.

"Edison was so interested in the idea that he began to draw plans himself and even spoke to Congress about the wisdom of appropriating money for the lab," recalled Gebhard. "The board had many influential members from industry, however, who didn't agree with all of the inventor's ideas. Edison had the notion that the Navy should build its own submarines, for instance, without outside contractors and should turn out about one a week. He didn't have a real concept of the importance of an experimental lab which could do research in all fields—not just build ships and equipment."

After the war, government officials sided with the consulting board's majority and Secretary of the Navy Josephus Daniels ordered plans developed for a Navy lab at Anacostia. The contract was awarded in 1920 and by 1923 the building (today's NRL building 1) was dedicated. Edison would have nothing further to do with the idea. Though his bust now stands at NRL's gate, he never set foot on the lab's grounds.

Meanwhile, Dr. Gebhard, Dr. Taylor and other Navy scientists were experimenting with extremely high frequency radio waves and discovered that there was a noticeable and predictable disturbance in reception whenever a ship passed between an active transmitter and receiver. Further experimentation showed that ships and aircraft, though miles distant, also could be detected by directing radio waves in their direction and watching for interference.

Dr. Taylor wrote a letter to the Navy Department asking for support to continue this research, but the Navy wasn't interested in spending more money on it. Though radar would inevitably prove invaluable, the Navy couldn't see much use for it at that time.

> "Though radar would inevitably prove invaluable, the Navy couldn't see much use for it at that time."

The stalwart scientists continued their experimentation as money was available and in 1934 demonstrated a crude type of radar (by today's standards) to the Navy. Even then, the Navy was reluctant to sink much money into the project because units were too bulky to place in ships. "We did manage to interest one congressman though," Gebhard said, "and he pushed through a $100,000 appropriation for the lab. Then the Navy became interested in the project. When the Army realized the aircraft detection potential of radar, they too became interested."

Gebhard was given the job of producing a practical unit sufficiently small to place in ships. In 1938, the XAF (experimental radio detector and ranging set)—known among sailors as the "flying mattress" because of its shape—was installed on the battleship USS *New York*. In early 1939, the XAF was demonstrated during fleet exercises in the Caribbean.

Rear Admiral A. W. Johnson, Commander, Atlantic Squadron, reported: "The XAF is one of the most important military developments since the advent of radio itself." He urged the Navy to go to radar-equipped ships as soon as possible and it was immediately installed on 19. "By the time World War II broke out," Gebhard said, "civilian contractors were producing our radar and the Navy took it to war."

Dr. Gebhard reached mandatory retirement age in 1966 and retired from his post as Superintendent of the Radio Division (a division subsequently split into several). Though he stayed on as a consultant, and continued to work every day, Gebhard devoted much of his time to compiling information for a book which he wrote about the Navy's many contributions to electronics. "It was a laborious job," said Gebhard, "however, in my estimation, the Navy had never been given credit for all the wonderful inventions it had created. Now they are documented," he said, patting his 452-page compendium.

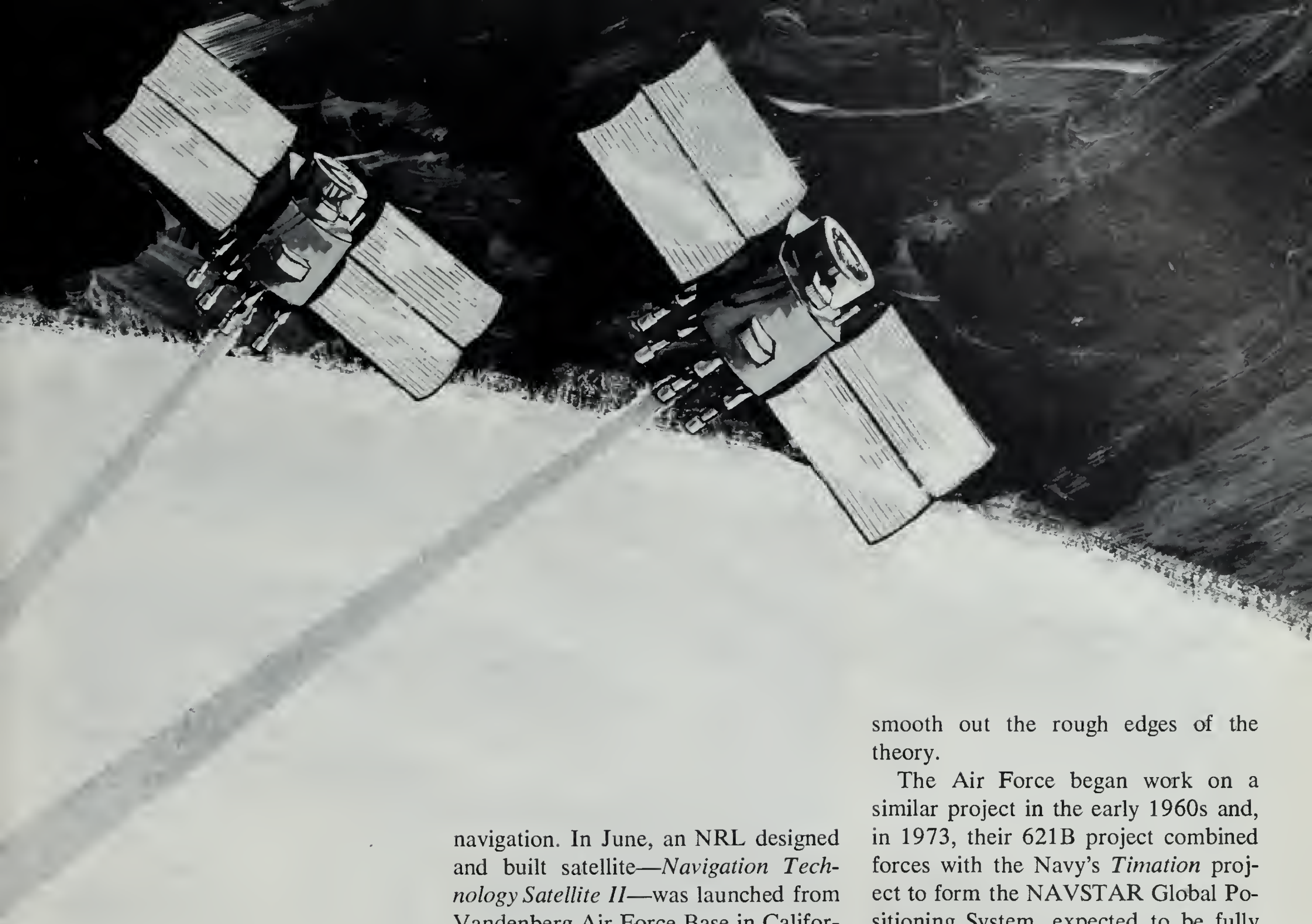
After 60 years' service to his country, Dr. Gebhard finds it impossible to cite just one highlight of his career. "There were many highlights," he said. "You begin working on an idea and watch it develop into a concept and wonder if it will ever amount to anything worthwhile. Radar was like that at first. We just did our jobs and never really thought much about what would eventually develop. We were occupied with the 'doing' rather than the recognition."

Thanks to this NRL plankholder (the last) and thousands of Navy civilians like him who were more occupied with the "doing" than with the broadcasting of their talents, our Navy and country reaped countless benefits.

"We were occupied with the doing rather than the recognition."

NRL NAVSTAR

PLOTTING YOUR COURSE BY SATELLITE



BY JO2 DAN WHEELER

Since the days of the Phoenicians, ships have lost their way. Too often, craggy shoals or deserted beaches were their undoing.

Though heavy seas frequently were the culprit, inaccurate charts were sometimes at fault, especially in the days of sail. Sometimes, too, navigation equipment was faulty or steering gear failed. Occasionally, a careless navigator took a hasty fix or plotted an inaccurate course and he, of course, was squarely at fault.

Equipment will continue to fail periodically, but the Naval Research Laboratory (NRL) in Washington is doing something to eliminate human error in navigation. In June, an NRL designed and built satellite—*Navigation Technology Satellite II*—was launched from Vandenberg Air Force Base in California. It was the first in a series of 24 which soon will form a global navigational network capable of pinpointing a ship's position instantly regardless of weather conditions.

Navigation Technology Satellite II (NTS-2), now in a 12-hour orbit around the earth, is by no means the first satellite designed or built by NRL scientists, engineers and technicians. Since 1955, NRL has been conceiving, designing and building for America's space programs and, in fact, this group was responsible for our second successful satellite, *Vanguard I* in 1958.

Vanguard technology paved the way for NRL's *Timation I* (TIMe/navigATION) satellite, launched in 1967 to test the validity of an adventurous idea—formation of a navigation system capable of three dimensional position fixing via signals transmitted from satellites. Two years later, NRL launched *Timation II* to further test component parts and smooth out the rough edges of the theory.

The Air Force began work on a similar project in the early 1960s and, in 1973, their 621B project combined forces with the Navy's *Timation* project to form the NAVSTAR Global Positioning System, expected to be fully operational by the mid-1980s. NRL's *Timation III* satellite, built before the merger but not launched, was redesignated NTS-1 and put into orbit in summer, 1974. It is still functioning and sending data.

Even before NTS-1 was built, two *Timation* satellites already in orbit were being put to practical use by scientists. In 1972 and again in 1973, chronometers at the Royal Greenwich Observatory in England were synchronized with those at the U.S. Naval Observatory in Washington and those at the Division of National Mapping in Australia by means of a crystal oscillator in the satellites.

The introduction of satellites carrying spaceborne atomic clocks eliminated the necessity of having to fly an atomic clock from country to country in order to synchronize international timekeepers. Precise time has become increasingly important in recent years with the advent of international space

NRL NAVSTAR

projects and abundant global navigation, each of which requires time accuracy measured to the millionths of a second. Satellite time synchronization is "far more accurate and reliable" according to NRL scientists.

This same accuracy, tested and improved by *Timation* satellites, is important to NAVSTAR GPS, for without it, all positional readings would be inaccurate when based on satellite signals. Eventually, the 24-satellite system will be able to provide continuous global coverage for all users and will have the capability for an unlimited number of participants, as well as selective denial capability.

Additionally, the system will be highly resistant to jamming and it will also be unaffected by adverse weather conditions. Only authorized users will be able to monitor the satellites' signals (employing special receiver sets), and it would cost an enemy a great deal to build similar receivers. The signals, however, can be coded, scrambled or, if necessary to free world defense, discontinued altogether.

Late this year, the Air Force will begin launching five of their own *Navigation Development Satellites* to form a test system with NTS-2; selected users can evaluate, in a limited manner, the progress of the project. By 1981, NRL will build and launch one final Navy satellite for the system—the remainder will be of the NDS variety.

Once all 24 satellites are in orbit, the system will work like this:

- Three circular orbital planes will contain eight satellites each—all of which will be sending electronic signals to receivers.
- Navigators, instead of "shooting the stars" or "taking sun lines," will "shoot the satellites." (Each satellite will tell the navigator *its own* exact position and the navigator will assume, for the moment, that his clock is synchronized with the satellite's atomic clock).
- By shooting three satellites, the navigator will get an equation with three unknowns—latitude, longitude and altitude.
- Once he has solved for those unknowns, he will shoot a fourth satellite to find the exact time and subsequently adjust his calculations for pinpoint accuracy and velocity.

This gives a rough idea of the NAVSTAR GPS capability. In practice, however, *it doesn't work that way.*

All of these calculations are done instantaneously by a tactical receiver and computer which provides data readout to the navigator. Even ground troops will be able to carry a "manpack" small enough to perform the same function.

When all of the satellites are in orbit, there will always be at least five available anywhere on earth for position fixing. Even if several fail—and they will—some positional data will be immediately available and the rest—as other satellites pass overhead—minutes later.

Each satellite is expected to have an operational life of five years. During that time, partial and total breakdowns will create gaps in the signals. When this happens, new satellites will be launched assuring continuity of the system. Operational life and functional capability of satellites is expected to increase as the program continues.

This is just one more way that Navy technology is being used on a worldwide basis for peacetime improvements.

How the Satellite Works

Most readers are satisfied just knowing that NTS-2 is a satellite used to fix positions of ground troops, aircraft and ships. Others, however, want to know more about how it works and the equipment it carries:

- INITIAL LAUNCH VEHICLE TEST—The NTS-2 launch provided the first test of the GPS launch system consisting of the Atlas Booster, the stage vehicle (which included two perigee kick motors and an apogee kick motor).

- DEMONSTRATION OF GPS EQUIPMENT—The GPS Navigation signal assembly on NTS-2 allows scientists to test the GPS ground equipment.

- ELEMENT OF DEMONSTRATION CONSTELLATION—This satellite is an element of GPS Phase I demonstration constellation to provide the initial characteristics of GPS orbits and to provide needed signals in conjunction with other Phase I satellites, to demonstrate periodic three dimension navigation.

- TECHNOLOGY ITEMS—In addition to providing data as part of the Phase I constellation, NTS-2 contains technology items that will be useful in later satellites: cesium beam tubes (atomic clocks) for the frequency standards; a nickel-cadmium and a nickel-hydrogen battery are used with the objective of flight qualifying the latter; two types of radiation dosimeters to measure radiation levels in space; an experimental solar cell package for space-qualification; and laser retroreflectors making it possible to check the satellite's position independently of radio signals and thereby measure the accuracy of the orbit as determined from radio transmissions.

And by the way, NTS-2 is in a circular type, 12-hour orbit with the satellite revolving at an altitude of 10,898 nautical miles with an inclination of 63 degrees.

Any questions?

Roger L. Easton

A Dream Come True

When the NAVSTAR Global Positioning System becomes operational in the mid-1980s, a career dream of Roger L. Easton will have been realized. Easton, the Navy's principal investigator for space technology in the NAVSTAR GPS program, conceived and directed the *Timation* satellite program in the 1960s and now has programmed it into a workable system as a basis for the NAVSTAR system.

The scientist joined the Naval Research Laboratory in 1943 and immediately began research on a blind landing system for aircraft. In 1945, he worked on a system to identify friend or foe (IFF) and distance measuring equipment.

Later, he designed the Minitrack system for satellite orbit determination and assisted in the development of a locator system for the Army Map Service.

Probably his most well-known achievement was the design of the *Vanguard I,* America's second successful satellite and now the oldest man-made satellite still in earth orbit. Easton also developed the Navy Space Surveillance System which is used for the detection and determination of orbits of earth satellites.

Winner of the Distinguished Civilian Service Award, Easton has written 30 technical documents, holds nine patents for his work, during his tenure, and has designed 25 satellites. ⚓

Honors Queen Elizabeth II

Silver Jubilee

STORY BY
JO1 JERRY ATCHISON

A United States sailor and a British "Jack" stood on the sidewalk facing Portsmouth's harbor. The two were conducting an animated conversation, oblivious to the stream of tourists and other sailors who poured around them.

"That's ridiculous. I don't have an accent, you're the one with the accent," the American sailor said in distinctive Texas panhandle tones.

"I can hardly understand a word you're saying. You've got the accent," said the Britisher in a manner defying even phonetic spelling.

The two were conducting their own type of cultural exchange. They were immersed in the fascinating business of learning about other cultures by visiting other lands and talking with people.

They were only two of more than 30,000 sailors from countries around the world who had come to this historic English seaport city to commemorate the 25th Anniversary of Queen Elizabeth II's coronation.

The Silver Jubilee Naval Review, held off Portsmouth June 28, brought these sailors from 170 ships and 18 countries together.

It was an event that bore many similarities to last year's International Naval Review honoring the 200th birthday of the United States. But the Portsmouth event possessed its own distinction—distinctions that set it far apart from any celebration.

"The Hard," Portsmouth's main waterfront street, was focal point for many of the Naval Review festivities. The good natured crush of tourists and sailors, souvenir sellers and townfolk, fed the festive spirit born of a nation's respect for its Queen.

The 1,400 American sailors who had arrived aboard a seven-ship task group, immediately set about the business of taking a very close look at England. Among them were almost 400 midshipmen on their summer training cruise. These novice Navymen received not only the opportunity to visit foreign lands, but worked alongside experienced sailors as well. (→)

MARINES
EIIR

The weekend preceding the review was filled with tours of London, Stonehenge, Stratford-on-Avon and other historical spots. Midshipmen and sailors studied Big Ben through their camera viewfinders.

"I'm probably as familiar with the sights of London as those of Washington, D.C., because I've seen pictures of them in books," said one midshipman as he stood in front of Buckingham Palace. "But there sure is a big difference between pictures and the real thing. I wonder what Washington *really* looks like. . . . "

In Portsmouth, a weathered old man wearing a fisherman's sweater leaned against a pier stanchion and watched the ships gathering in the bay. Both the old man and his sweater had obviously spent many years at sea. "You know, I've not seen the likes of this since you Yanks were here getting everything together for the invasion of Normandy," he said. "The only thing missing is the barrage balloons and the cases of Coca-Cola when they got ashore in France."

Warming to his World War II recollections, the oldster puffed on a hand-rolled cigarette ("Can't abide the machine made ones.") and pointed toward the Royal Yacht *Britannia.* "It's a wonder how time flies. Her Majesty is celebratin' her 25th and it seems just like yesterday she was goin' on the radio and tellin' us—she was just a child, mind you—tellin' us we Brits would win the war."

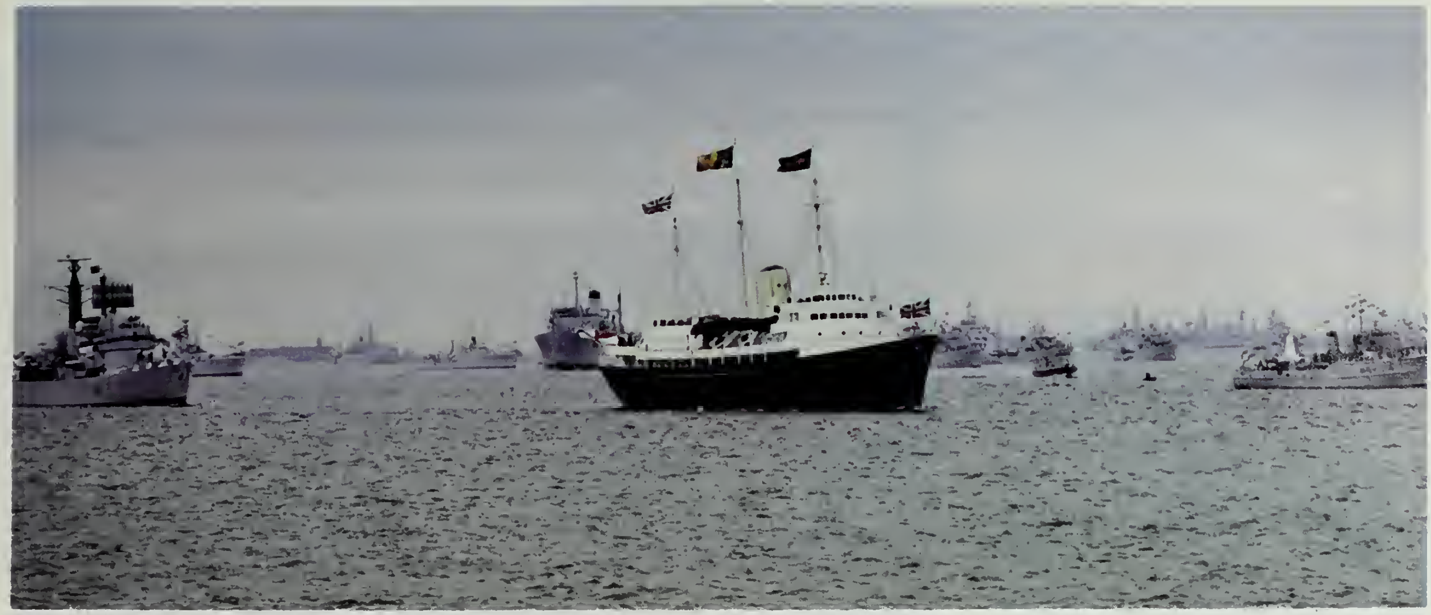
The old man's deep affection for his Queen is shared by the majority of his countrymen. In addition to this affection is a shared heritage—one of more than 2,000 years of naval history that surrounds this island nation.

And as the ships reached their anchorages, these sea-going people lined the banks and scanned the seven-mile-long assembly with practiced eyes. The 100 Royal Navy ships included the 43,000-ton aircraft carrier HMS *Ark Royal* (soon to be decommissioned), four nuclear-powered submarines and the only ship present at the Queen's 1953 Coronation Review—the deep diving vessel HMS *Reclaim.*

Ships from the navies of the Commonwealth, NATO, CENTO and EEC nations were there. The largest visitor was Australia's 16,000-ton aircraft carrier HMAS *Melbourne*; the one travelling the furthest was the New Zealand frigate *Canterbury*; and the only nuclear-powered surface warship attending was our own guided missile cruiser USS *California.*

Largest merchant ship present—indeed, the largest ship at the Review—was the huge 277,748-ton supertanker *British Respect.*

The morning of the Review was cold and blustery. Sheets of rain gusted back and forth across the water. A Royal Navy spokesman explained why this kind of weather was not unexpect-



ed even though the preceding days had been warm and sunny:

"Her Majesty has demonstrated throughout her 25-year reign that she is singularly possessed of uncommon bad luck when it comes to the weather cooperating with scheduled royal events," he said with a smile.

"During last summer's severe drought there was even some talk—perhaps a bit of it serious—about moving up her Jubilee Celebration to ensure some rain."

Rain or not, the Review began as scheduled. As the Royal Marine Band played "God Save The Queen," *Britannia* slipped from the pier and steamed toward the head of the line. Thousands of spectators, many waving "Union Jacks," cheered her along the shore, atop buildings and from countless small craft.

At 1430, *Britannia*—preceded (as dictated by tradition) by the Guild the Elder Brethren of Trinity House on board their ship *Patricia*—began the stately procession past the line of ships wedged between the Isle of Wight off Portsmouth and Spithead.

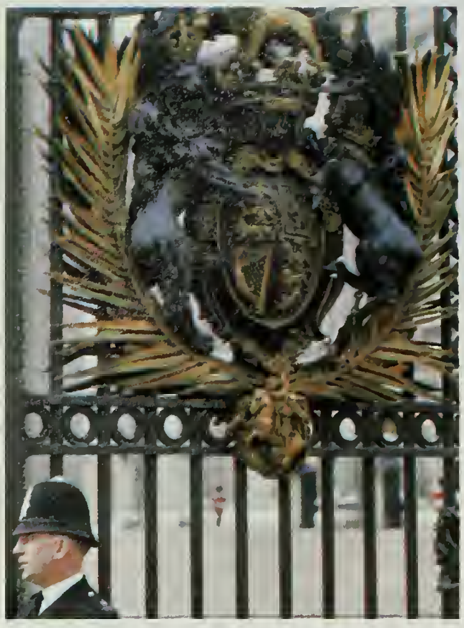
The two United States' ships, *California* and the nuclear-powered attack submarine *Billfish,* stood in the Solent Channel. The two were "dressed" with rails manned and anchored at midpoint along the southern line of ships.

As *Britannia* passed *California,* 385 Naval Academy and NROTC midshipmen followed the lead set by the British ships; they uncovered, waved their hats high, and gave the Queen three cheers. From *California*'s fantail, a Navy band played the British National Anthem and apparently attracted Queen Elizabeth's attention—she made a special move to the rail of her ship and waved to *California.*

Next in line, *Billfish,* with limited space on deck for crewmen to line, seconded the wave and gave a cheer heard easily across the waters.

Reaching the end of the seven-mile line of ships, *Britannia* came about and headed down the other line of ships formed nearer shore.

With the Review completed, *Britannia* anchored at her starting spot and awaited the scheduled massive flyover



by more than 150 Royal Navy and Marine helicopters and fixed-wing aircraft. Wave after wave of helos flew over the ships. Then came the airplanes turn. As if on cue, the clouds lowered, the rain began once again and the fixed-wing portion of the flyover was suddenly cancelled.

"It's just what one might expect," said a Royal Fleet Auxiliary midshipman with a sigh.

The review was over and all that was left were the final preparations for each ship to get underway for the next port call. *California* would continue on to Edinburgh, Scotland and Oslo, Norway; the amphibious troop transport USS *Francis Marion* got underway for Copenhagen, Denmark; and the others had their own arranged destinations to reach.

Shortly before *Francis Marion* sailed, two other sailors went over it once more, "Now let me see if I've got it right," one said. "A 'boot' is the trunk of a car and a 'lorry' is a truck."

"I think that's right," the other said. "But what if there was a trunk in a truck?"

Linehandlers standing by on the pier allowed this question would have to wait an answer when the ship called again in England. ⚓

Photos by PH1 Jim Toon, JO2 Art Robb, PH2 Dwain Patton, PH3 Kevin Murphy, PH3 Bob Hamilton and JO1 Atchison.

Henry V's Precedent

Fleets have gathered at Spithead for more than 2,000 years because of its unique location—a large sheltered anchorage with access to the sea at both ends, close to the rest of Europe and, yet, reasonably near to the ancient and modern capitals of England, Winchester and London. Roman ships from Portchester and Chichester would gather at Spithead before departing in company for Gaul (France) and a few centuries later Alfred the Great's war vessels met there before leaving to fight the Danes.

More than 1,000 ships gathered in the anchorage in June, 1346 before King Edward III sailed to fight in France. It was not until 1415 that Henry V made the first Royal Review of his ships.

Queen Elizabeth the First reviewed a squadron at Spithead in 1582 and records indicate that this was the first time yards were manned and salutes fired.

Charles II inspected a fleet at Portsmouth in 1662 (brought there by his Royal Watermen from the Thames) and William III reviewed the fleet in 1693.

Other Reviews occurring near Portsmouth included:

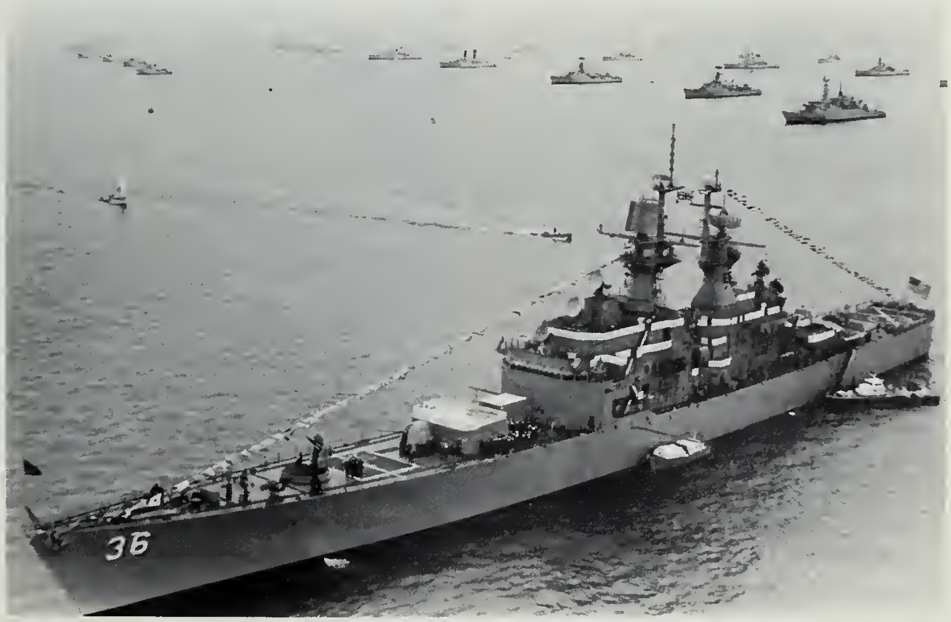
- March, 1700—possibly the first mock naval battle was conducted to mark the visit of Peter the Great, Czar of Muscovy.
- June 1773—King George III took time out from his troubles with the colonies to review the fleet and to be saluted by a "triple discharge of cannon."
- June 1794—Admiral Lord Howe arrived in Spithead with captured French ships under his command. This is the only authenticated Review of a victorious fleet by the sovereign immediately after the ships returned to harbor following the battle. With the fleet was HMS *Valiant*—her later "sister" was in attendance at this year's Silver Jubilee.
- 1814—a Review of the fleet was held to celebrate the Treaty of Paris. This was the last Review in which only sailing vessels took part.
- 1844—French warships with King Louis Phillipe of France embarked, were met and escorted by British warships; Queen Victoria reviewed the combined fleets.
- 1845—a Naval Review of the Experimental Squadron at Spithead was witnessed by Queen Victoria and Prince Albert.
- 1853—the first Royal Inspection of a Fleet of steam warships was held.

At least 20 additional reviews were held at Spithead between 1853 and 1944 when the greatest, but probably least publicized assembly occurred. King George VI inspected the "D-Day" Isle of Wight anchorage area. On this occasion, the lines stretched up and down the Solent. More than 800 ships; most of them landing craft, minesweepers and auxiliary vessels, were making final invasion (Normandy landing) preparations.

On June 15, 1953, another fleet assembled for Queen Elizabeth II's coronation review.

Queen Victoria was the only British monarch to celebrate both her Golden (50 years) and Diamond (75 years) Jubilees.

The Silver Jubilee celebration in honor of Queen Elizabeth II's 25 years on the throne demonstrates that the British, as in years' past, continue to perpetuate the proud traditions of the Royal Navy and the admiration they feel for the Royal family. ⚓



USS California *(CGN 36) (foreground) and ships from 18 nations at anchor off the Portsmouth coast.*

Ring in the

Chief of Naval Operations Admiral James L. Holloway III recently announced the Navy's decision to return to the traditional bell-bottom style uniform for sailors in pay grades E-1 through E-4. Personnel in this group were chosen because, in an official Navy poll conducted last year, they expressed the greatest desire as a group to return to the bell-bottom uniform.

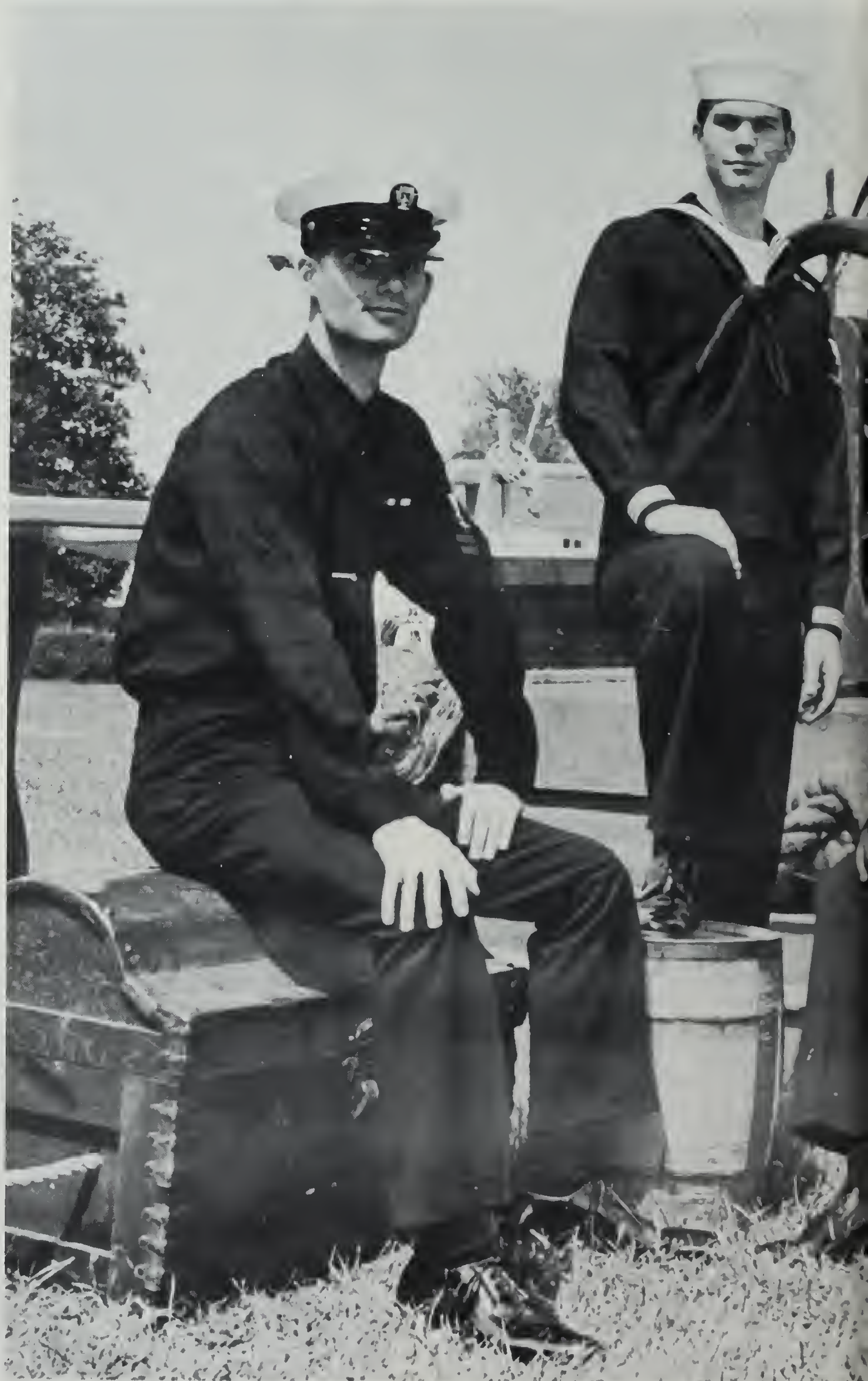
During phase one of the return to bell-bottoms 20,000 fleet unit personnel will be issued and will wear bell-bottoms to evaluate the uniform for durability and ease of maintenance of new fabrics. Fleet commanders-in-chief will select specific Navy units to participate in the evaluation.

Both blue and white versions of the classic dress and undress Navy uniform with jumper and bell-bottom sytling will be evaluated. Fabrics to be evaluated include a blue serge material and a white cotton-polyester blend. Blue melton material, from which previous bell-bottom blues were made, no longer is available in the quantity required, and the white cotton-polyester material is expected to be an improvement over the all-cotton whites worn before. The traditional white hat also will be evaluated in the cotton-polyester blend material.

By Spring of next year, it is expected that the new bell-bottom uniform will be available commercially also. At that time, other eligible personnel will be authorized to purchase and wear the new uniform.

The Navy will stop issuing the double breasted service dress blue coat to recruits during phase one. The current winter blue and summer blue uniforms will be authorized, as appropriate, for service dress wear during the evaulation period.

Final details of the full uniform conversion plan will be determined and announced following the evaluation.



Bells

Dressing the Navy

BY JO2 THOMAS A. TOOMER

When CNO announced the return to bell bottom style uniforms, one might have expected the "General Quarters" alarm to go off at the Navy Clothing and Textile Research Facility (NCTRF), in Natick, Mass.

But according to Mr. Seymour Lash, Director of Clothing Development, the Navy's garment center is all ready to go to work on the jumper and bell bottom uniform. Patterns are now being cut and prepared to be sent to mills, and testing of the new uniform specifications is set to get underway.

In its laboratories and test chambers 19 miles west of Boston, NCTRF researchers and textile technologists are testing a wide variety of commercial materials proposed for Navy use.

It is anticipated that the jumper and pants will be made of a new 15-ounce, all-wool serge material—not the 100 per cent Melton wool previously used. "The reason," Mr. Lash said, "is Melton is no longer commercially milled."

The change in uniforms spotlights the research center's responsibility of dressing up the Navy—keeping the sailor "squared away" from head to foot. But another very important mission of the activity is the design and testing of protective clothing to guard against the many hazards faced by sailors from the artic to the tropics. This has often meant that what they couldn't find on the commercial market, they would have to concoct for themselves.

Researchers at the facility laid the groundwork for numerous innovations in the field of protective clothing and textiles. It developed such items as aluminized firefighting suits, a disposable covering for torpedo repairmen and submarine crew uniforms.

Every piece of fabric used for protective clothing and general dress undergoes extensive evaluation and testing. Facts about its tearing properties, its stretching properties, its fading properties, its washing properties and its "pulling" properties, are gathered from these assorted tests.

If everyone in the Navy had one size and shape, the jobs of the patternmakers, designers and testers would be much easier. But they must deal with hundreds of thousands of sizes and shapes. And for this, a whole range of headless dummies fill in the spaces for the "average" sailor.

With their help, and with nearly three decades of experience, the Navy clothing and Textile Research Facility will go on helping to keep Navy sailors "squared away"—and safe.

Three Centuries of Tradition

Sure, everyone knows that the bell-bottom style uniform has been famous around the world for its ability to attract the fair young sex in any port. But did you know . . .

- **The Neckerchief**—The black kerchief or bandana historically began to appear during the 16th and 17th centuries and was used either as a sweat band or a simple closure for the collar. Black was the predominant color as it was the most practical shade and did not readily show dirt or tar. Unfortunately there are no records that support the persistent myth that the black kerchief represents a sign of mourning for Nelson's demise.

- **Two Stars on Back Collar of Dress Jumper**—During the 1840s, sailors voluntarily embellished their uniforms with devices and stars that were very popular. It was not until 1866 that stars at either corner of the flap were standardized and authorized for no other apparent reason than aesthetic design balance.

- **Three Rows of Piping**—Piping first appeared as a decorative device during the 1840s which sailors added to break up the drabness of their uniform. In 1866 the collar flap was extended to nine inches to accommodate a standardized system of white piping to distinguish petty officers (three rows), ordinary seamen (two rows) and landsmen and boys (one row). Corresponding rows were displayed on the cuff.

In 1876 the white tape on the collar was standardized to three rows for all enlisted wearing the jumper, with rank to be determined by the petty officer insignia, and cuff stripes for the seaman ranks. In 1947, cuff piping was standardized at three rows for all hands since rating badges and added piping (diagonal white, red, green or blue stripes on the left sleeve) to denote rank was repetitious.

Again, the legend of the three collar rows to commemorate Nelson's sea victories is a myth and has no basis of fact in any authoritative history of uniforms. It evolved merely as a decorative device and, much later, served to distinguish between rates.

- **13 Buttons**—During the Civil War, trousers had either a fly front or a seven-button broadfall depending upon manufacturers. In 1899, the broadfall was enlarged and required 11 buttons to close. A further increase in depth of the flap sides for comfort would add two buttons for a total of 13. Although myth prevails that the number of buttons represented the original colonies, 13 buttons happened to be the final number.

- **White Hat**—In 1852 a white cover was added to the soft visorless blue hat. In 1866, regulations permitted a white sennet straw hat as an additional item for summer wear. During the 1880s, the white "sailor hat" appeared as a low rolled brim, high-domed item made of wedge shaped pieces of canvas; it replaced the straw hat. The canvas was eventually replaced by cotton as a cheaper and more comfortable material.

The Navy Uniform Board received numerous complaints about the shape and durability of the sailors' white hat which, especially in hot climates, caused the low brim to droop and caused an unsightly appearance. The resultant corrective actions caused more stitching to be placed in the brim which, as well, caused the sides to be stiffer and stand upright. This practice of reinforced stitching continued to mold the hat into the present shape.

- **The Neckerchief Knot**—There does not appear to be any historical significance attached to this knot other than it being a standard square knot widely used by sailors in their work. This knot, naturally, allows for the proper appearance for the neckerchief. The actual description of the knot appears in the 1913 Uniform Regulations. ⚓

Rights & Benefits

Homeowners Assistance Program

Any economist will tell you with an air of academic certainty that if you must sell and sell quickly, a buyers' market is created regardless of the product. It doesn't take a sea lawyer to tell you with equal assurance that if a military installation experiences a massive reduction in force, realignment action or closure, the price of real estate near that base is going to plummet.

Installation reductions and closures don't happen often, yet when they do, military and civilian employees who are forced to relocate are protected against sustaining substantial losses on the sale of their property by the DoD Homeowners Assistance Program. Enacted in 1966, this program authorizes the Secretary of Defense to make partial reimbursement to eligible members for losses incurred due to the forced sale of their homes. Not everyone employed on an affected base is eligible for assistance and there are some restrictions:

- Employees paid with nonappropriated funds, temporary employees and government contractor personnel are not covered by the program.
- There must have been a closure, reduction or realignment action (hereafter called "action") of sufficient magnitude to result in an adverse effect on real estate prices in the area of the installation. A mere announcement of a plan to study or consider an action doesn't qualify a homeowner for reimbursement for losses. An announcement stating that a reduction of some sort is definitely going to occur must first be made.
- At the time of the action, the homeowner must have been an occupant (owner-occupant) of his one- or two-family dwelling.
- Generally, trailer and mobile homes do not qualify as "one- or two-family dwelling" under the program since most can readily be moved to a new location.
- The site of a homeowner's new employment following relocation must be beyond normal commuting distance from the dwelling for which relief is sought. What constitutes "normal commuting distance" is determined by DoD.

The exact amount of government reimbursement is determined by the sale option a homeowner chooses. He may take a cash payment for losses incurred as a result of a private sale, or he may sell directly to the government, or—in rare instances—he may be reimbursed for losses sustained due to foreclosure.

Generally, a private sale by the owner or his agent is the most advantageous. If a homeowner sells his dwelling at a loss, the amount the government will reimburse him will not be more than 95 per cent of the difference between the fair market value before the action date and the fair market value at the time of sale (or actual sale price, whichever is higher.) All property values are determined by the government on the basis of comparable sales.

If a homeowner, however, can show that he has tried to sell his property at the government-assessed value and the most favorable price offered is lower, the actual sale price will usually be accepted as representing the true fair market value.

A homeowner may sell directly to Uncle Sam if he can demonstrate that no reasonable market for his property exists due to the reduction action. The government will then pay him not more than 90 per cent of the fair market value before the action date, less any outstanding mortgage. If the mortgage is greater than 90 per cent of the fair market value before the announcement, the government will still buy the home but will not pay any cash to the owner.

Off-base housing will not be purchased by the government when the reduction action takes place in a foreign country.

Reimbursement for foreclosure losses rarely occurs today. It became a part of the program in the beginning only because many persons had lost their homes before assistance was available. If a homeowner has not qualified for assistance in time to avoid foreclosure and is determined eligible at a later date, he may still be compensated for his losses.

To apply for relief under the DoD Homeowners Assistance Program, an individual must complete an application form (DD Form 1607), obtainable from any personnel office or field office of the U. S. Army Corps of Engineers (the administrators of the program for SecDef). Application must be made within three years after the announcement of a base closure, reduction in force or realignment action.

Sailors of the Year

Accepting the

BMC Richard Knepper, Jr.: I have my own standards to meet.

The Sailor of the Year Program, established in 1972, recognizes and rewards top-notch active duty Navy men and women in paygrades E-4 through E-6. The selectees are meritoriously advanced to the next higher pay grade by the Secretary of the Navy; receive a Fleet Reserve Association sponsored, all-expense paid trip to Washington, D.C. and five days R&R at the CONUS location of their choice; and assignment with their respective Master Chief Petty Officer of the Fleet. The Shore Sailor of the Year serves with the Master Chief Petty Officer of the Naval Education and Training Command.

The 1977 Sailors of the Year are: (Shore) Chief Hull Technician Dale K. Lueck, nominated by the Naval School, Diving and Salvage, Washington, D.C.; (Pacific Fleet) Chief Boatswain's Mate Richard D. Knepper, Jr., SEAL Team ONE; and (Atlantic Fleet) Chief Hospital Corpsman Joseph B. Laskowski, Ocean Minesweeper USS *Detector* (MSO 429).

It wasn't all the gold on the man's arm or even the colorful doodads on his chest that made little Lisa Lueck back away from the uniformed man. She just didn't understand that he only wanted to shake her hand— the hand that was holding her cookie.

Chief of Naval Operations Admiral James L. Holloway III immediately understood the child's apprehension.

"You aren't the only one who thinks I'm trying to take their cookie away," he said, smiling.

Milk and cookies in the CNO's office were the highlight of the day for Lisa, but for Chief Petty Officers Dale K. Lueck, Richard D. Knepper, Jr., and Joseph B. Laskowski, it was the highlight of their careers— they were being honored as the 1977 Sailors of the Year.

Lueck enlisted in 1969 and, after recruit training and Shipfitter's "A" school, was assigned to the destroyer escort USS *Bradley* (DE 1041) (now FF 1041). While assigned to *Bradley,* he became interested in diving— an ambition that almost cost the Navy a good man.

"I submitted a number of requests for transfer to diving school, but they were all disapproved," he said. "I got frustrated and decided I'd dive, in or out of the Navy!"

Fortunately, Lueck's division officer came to his aid. He advised Lueck to forward the disapproved requests all the way through the chain of command.

He did and in 1971 his request was approved. He attended diving school in San Diego and graduated at the top of his class. Eventually, he went on to First Class Diver School in Washington, and, after paying his "dues" in the fleet, returned to Washington in 1975 as a ship salvage techniques instructor at the Naval School, Diving and Salvage. While working in underwater salvage demolition training, Lueck developed new demolition range training procedures and made major revisions to the training curriculum.

Underwater demolition and diving play a large part in Richard D. Knepper's life too— although in quite a different way. He's a SEAL.

Knepper entered the Navy in 1966 and spent a year on board the USS *Horne* (DLG 30) (now CG 30); he then volunteered for Underwater Demolition Team training.

Award for All

After basic UDT school training, he was assigned to SEAL Team ONE which he doesn't (or can't) discuss. The only way to describe Knepper's nine-year tour with the team is— three tours in Vietnam, a Bronze Star, four Navy Commendation Medals (each with combat "V"), the Navy Achievement Medal and attendance of more than 30 schools including Army Ranger training, airborne and Survival, Evasion, Resistance and Escape (SERE) training.

It's no wonder that Knepper, who has not been extremely active in community affairs, is the exception to the usual Sailor of the Year award winner. His commanding officer put it in perspective.

"He's a dedicated sailor 24 hours a day . . . leaving little time for other activities."

Joseph B. Laskowski believes his involvement in civilian projects, as well as his professionalism, helped him win Sailor of the Year for the Atlantic Fleet.

"It was especially through my drug abuse education classes that I came into close contact with the community," he explained.

"I associated myself with the various community action groups and offered my services as a lecturer in pharmacology. One thing led to another. I would give lectures for area PTAs, church, civic groups and police departments. I affiliated myself with the Mental Health and Mental Retardation Board in Portsmouth, Va., and the city sent me to the University of Miami to learn about setting up a community awareness team."

In 1968 Laskowski graduated from high school and headed straight for the Navy recruiting office. Fresh out of training, he was sent to Camp Pendleton, Calif., attended Field Service Medical School and spent two years with the Fleet Marine Force in Vietnam, Okinawa, Taiwan, Japan and Korea.

HMC Joseph Laskowski: There are intangible benefits to being Sailor of the Year.

When he returned home, Laskowski attended the Medical Service Technician School at Portsmouth where he developed an interest in pharmacology and drug abuse problems. He realized, however, that to be effective in many areas he would have to broaden his educational background. So, he enrolled in an off-duty study program sponsored by George Washington University and earned an associate degree in science.

The Sailors of the Year have many things in common— all are married, have children, were first class petty officers (before the meritorious advancement by SECNAV), are decorated Vietnam veterans and, as Laskowski summed it up:

"When we sailors of the year accepted the award it wasn't just for ourselves and our families, but for all the enlisted people, and there are many who are outstanding." ⚓

HTC Dale Lueck: I decided I'd dive, in or out of the Navy.

An ancient

BY JO1 JIM HELTSLEY

Toss a coin as to which one is most famous—heads it's Charlie Blair, tails it's his vintage flying boat, and, if the coin lands on its edge, then it's Charlie's wife.

Charlie and his plane go back to the 1930s and both accomplished an awful lot in the air. But to start at the beginning . . .

Charlie Blair's life in the skies started back in 1931 when he won his wings at Pensacola. But he didn't stay Navy too long. Instead, he flew flying boats as a chief pilot for American Export Airlines, later American Overseas Airlines. In the late '40s the airline was bought out by Pan Am and Charlie continued as chief pilot, crossing the Atlantic more times than he cares to remember.

In those years Charlie Blair made the first 25-hour, nonstop transatlantic flight—with passengers and mail—in a flying boat. And he has another claim to aviation fame: he made a solo hop across the North Pole in a P-51 *Mustang* (which is now in the Smithsonian Air Museum). He's accomplished work for the Air Force, racked up 35,000 hours in the air (he still gets in 1,200 hours a year), and he won the Harmon International Trophy, the Thurlow Award and the Distinguished Flying Cross.

Today he's still crossing the Atlantic. Seems Charlie's wife, actress Maureen O'Hara, has a yen to fly—by flying boat of course—to Ireland every year. Just this past spring, the Blairs made a leisurely crossing in a 42-passenger, 30-year-old flying boat, with Charlie at the controls and wife

bird's one-way 'flight'

"Naval Aviation Museum... a good resting place for the Sikorsky."

and friends as passengers. They left the old boat at Foynes in Ireland as a tourist attraction. So much for one flying boat.

The plane in this tale, however, is NC41881, a VS-44 Sikorsky—which has also made a sort of final "flight" this year—a one-way trip from the Naval Station, Roosevelt Roads in Puerto Rico to the Naval Air Museum at Pensacola. Charlie Blair, now president of Antilles Air Boats in the Caribbean, gave it to the Navy. The old craft once was piloted by Blair under contract to the Navy—during World War II—and was used to ferry troops and supplies across the Atlantic.

Secretary of the Navy W. Graham Claytor, Jr., wrote Blair, "On behalf of the Naval Aviation Museum, I accept, with great pleasure and personal appreciation, your offer to donate the Sikorsky VS-44 flying boat."

Sailors and Seabees at Roosevelt Roads helped workers from Antilles Air Boats ready the ancient bird for its one-way trip to Florida by surface transportation.

The man and the VS-44 are one—Blair flew it all during the 1940s and, on Oct. 22, 1945, flew it to Foynes. The old flying boat was the last plane of its kind in and out of Ireland until the Blair's returned in their private Sandringham flying boat in the 1970s. Now, even the Sandringham will no longer be airborne—gone is the era of the great clippers.

When Blair, as chief pilot for Pan Am in the late '40s, started his second career as an airline owner/operator, he found a need for a flying boat and ended up leasing and finally buying his old friend, the VS-44 Sikorsky. Now Charlie and his plane have parted.

Pensacola was more than glad to get Charlie's flying boat. Museum director, retired Navy Capt. Grover Walker, said, "The real significance of this aircraft lies in the fact that she is the last available example of the giant seaplane transport era of the '30s. As such it should be preserved for future generations to view and appreciate."

Blair, author of "Red Ball in the Sky," belongs to the age of the big flying boats and props, not to the era of jets and in-flight movies. He has no need for the in-flight movies, anyway. Seems he doesn't watch movies—even his wife's. ⚓

Far left: Captain Charles Blair, president of Antilles Air Lines and donor of the Sikorsky VS-44; Left and below: the Sikorsky flying boat is prepared for her final trip, from St. Thomas, Virgin Islands, to Pensacola, Fla. (Photos by PH1 R. Boyle and LCDR A. Castro.)

DISASTER

a behind the scenes look

BY JO1 PETER SUNDBERG

"General quarters, general quarters, all hands man your battle stations, set material condition ZEBRA throughout the ship." The corpsman jumps out of his bunk and runs aft— there's been an explosion—men are hurt. Arriving on the scene, he immediately sizes up the situation: four men are down, one is seriously burned, in shock and has trouble breathing. The corpsman doesn't hesitate, he reaches for his battle bag, takes out a scalpel and cuts an airway in the man's throat to allow air to enter the lungs. The man breathes easier. The corpsman now faces another problem — that of keeping the airway open. He doesn't have the proper tool so he pulls out a ball-point pen, dismantles it and inserts the hollow cylinder into the man's throat . . .

Hundreds of miles away in Nebraska, a telephone rings. A man gropes in the dark for the receiver— his watch reads midnight— who could be calling at this hour?

"Hello?"

"Commander Hall, this is the district headquarters duty officer. There's been an accident on board a destroyer in the Caribbean— one of the seriously injured, Petty Officer 3rd Class Tony Mitchell, is from your area. You've been assigned as the Casualty Assistance Calls Officer (CACO). Please inform the next of kin (NOK) as soon as possible."

"All right, give me the details . . ."

In Illinois, the crew of an Air Force C-9 hospital plane has just returned to Scott Air Force Base from a routine MEDEVAC flight to San Diego. A message arrives saying that they are again needed, this time the mission is urgent and the crew members including two flight nurses and three medical technicians, rush to the C-9 and are once again air borne. Their destination, Guantanamo Bay, Cuba.

While helicopters hover over the destroyer and wait their turn to lift off and transfer the injured sailors to the hospital at Guantanamo Bay, Commander Hall is on his way to Mitchell's hometown in Nebraska to inform the young sailor's mother of the accident. Hall tries to think of words that will ease the blow—he's been a CACO before, but will never become accustomed to the unpleasant duty. He's studied the guidance provided by the Bureau of Naval Personnel's Casualty Assistance Branch and the Commandant of the Naval District many times, but there's no time to review it now. As in every case, the NOK has to be informed as quickly as possible. The mother has to be assured that everything possible is being done for her son and that he will soon be in the hands of experts at the National Naval Medical Center in Bethesda, Maryland.

In Miami, the Air Force C-9 taxis down the runway and waits for permission to take off and continue on to Guantanamo Bay. The flight crew spent that night at the Miami airfield due to nighttime flying restrictions imposed by the Cuban government. No planes are allowed in or out of Cuba after dark—regardless of the seriousness of the situation.

The flight crew is accustomed to such delays and, as a rule, won't fly at night if it can be avoided. It's been found that a patient's internal systems function better if he is allowed to rest at night, therefore, most cases are moved during waking hours. Although the C-9 is a fully-equipped hospital ward, the crew doesn't take chances. If something major should happen to a patient while in flight, the plane will land and transfer the patient to the nearest hospital.

The C-9 is one of twelve flown by the 375th Air MEDEVAC Wing assigned to Scott AFB in Belleville, Ill. The wing is responsible for medical evacuation of military personnel, dependents, retirees and their dependents, and Department of Defense employees in the continental United States, Canada and the Caribbean. Civilians, in a life or death case, can also be transported as was the case when two jumbo jets collided in the Canary Islands recently— two wing MEDEVAC flights transported the victims to Brooks Burn Center in San Antonio, Tex.

Meanwhile, at Guantanamo Bay hospital, the injured are awaiting evacuation to Bethesda; the Casualty Assistance Branch in Washington has fully implemented the Casualty

Assistance Calls Program (CACP) (see accompanying article); the medical center in Bethesda is ready for the victims; and three of the four NOKs have been notified— Mitchell's mother has yet to be informed.

Hall knocks again but still no response. Maybe the mother is still sleeping, it's only 0600. He knows this is the correct address— he verified it at the police station on his way into town. Could she be on her way to work, he thinks. No . . . in a town this size no one goes to work this early . . . or do they?

The next step is to check with the neighbors, regardless of the early hour. One tells him that she doesn't know where Mrs. Mitchell works, but he could find out at the service station up the street— Mrs. Mitchell's brother-in-law operates it. Hall drives to the gas station where Herman Mitchell tells him that she left late last night on a trip to Wyoming. Hall jumps into his car and heads for the police station where he makes two phone calls; one to state police headquarters asking for assistance in locating Mrs. Mitchell, the other to an NROTC unit commander located in Wyoming.

The state police issue an all points bulletin for Mrs. Mitchell and the officer in Wyoming assumes duties as CACO in the event the mother arrives there before she can be contacted. Three hours pass before the state troopers find Mrs. Mitchell. She calls her hometown police station where Hall waits. He gives her the news . . .

At Andrews Air Force Base in Maryland the noise of the helos warming up blankets the sound of the ambulances hurriedly being driven to the motionless C-9. Doors are flung open and four litters are carried from the plane and loaded onto the ambulances for delivery to the waiting helos. The helos take off, their final destination— the medical center at Bethesda where doctors wait. The next-of-kin are notified of the arrival of their son at Bethesda and advised of his condition at time of arrival. The next-of-kin then begin their long vigil at Bethesda.

Injury and death are not popular topics in Navy circles and you may regard yourself as one of the "it'll-never-happen-to-me" group, but accidents are an unfortunate fact of life in the Navy.

When they occur, a number of complex plans and procedures go into motion rapidly and effectively to insure that medical care is provided, and the needs of relatives are given sympathetic, professional attention.

(Editor's Note: The incident described in this article is based largely on an actual MEDEVAC/CACO situation. Names and some details have been changed.)

Casualty Assistance Call Program

The Casualty Assistance Calls Program (CACP) of the Navy has been in effect since 1955. It provides for the personal visit of a Casualty Assistance Calls Officer (CACO) to the family of each person in the Navy who becomes a casualty while on active duty for training or inactive duty training. Courtesy assistance is not normally provided to retirees except when volunteers can be found to implement the program in the retiree's area and in certain special cases such as when the deceased was a Medal of Honor winner.

Originally, CACP was initiated to cover the problems arising from the death of a Navy person. It has since been expanded to include missing personnel, prisoners of war, and internees.

The CACO is the most important participant in the program. As a result of the performance of this duty, the next of kin (NOK) of the casualty will receive compassionate understanding and attention appropriate to the occasion and advice concerning rights and benefits.

As soon as possible after a casualty has occurred, messages are sent to the Chief of Naval Personnel (Casualty Branch), Chief of Bureau of Medicine and Surgery and the commandant of the naval district in which the primary or secondary NOK reside. The district commander will designate a CACO who will personally notify the NOK usually before the incident is reported by the local news media. In the case of death, provides needed advice and counsel on funeral arrangements, provides aid in filing the official claims for such benefits as death gratuity, unpaid pay and allowance, government insurance, I.D. cards, medical care, reimbursements for burial expenses, relocation of dependents and household goods, VA and Social Security benefits and emergency financial assistance. Since some of these entitlements may extend for many years, the CACO's efforts in aiding the family are very important.

When a person is listed as missing or is seriously injured or ill, the CACO acts as liaison between the NOK and the Navy. In addition to advising the NOK on their rights and benefits, the CACO will make regular reports to the NOK on the status of the casualty. In the case of missing members the CACO will be the primary liaison between the Navy and the next-of-kin for a period of years in some cases.

Whatever the case, you can be assured that the Navy will take care of its own. ⚓

Bearings

Pegasus: Maneuverability, Speed and Weaponry

The winged horse—USS *Pegasus* (PHM 1)—joined the Pacific Fleet in July. The first of its class, this patrol hydrofoil missile ship (named after a figure in Greek mythology) is attached to Destroyer Squadron NINE in San Diego.

Pegasus is capable of very high speeds (40+ knots), and, because of her submerged foils and automatic control system, she can maintain this speed even in rough seas.

Carrying eight *Harpoon* missiles and an automatically controlled, rapid-fire 76mm cannon, *Pegasus'* mission is to operate offensively against major surface combatants and other surface craft. She is also meant to conduct surveillance, screening and special operations.

Pegasus is much more maneuverable than conventional ships. She can turn twice as fast in about one-third the distance in rough as well as calm seas, making her a much more difficult target to hit.

Manned by 21 personnel, the hydrofoil missile ship has a 131-foot overall length with a 28-foot beam. She is propelled by two diesel engines with waterjets while hullborne and one gas turbine engine with waterjet while foilborne.

Surviving the Initiation

"This initiation has long and cherished tradition in the Navy. Until the rite has been performed, an individual coming into our ranks remains an E-7 and not a Chief Petty Officer. If you are able to survive this initiation you may then, with the total respect of the chief petty officers of the U.S. Navy, call yourself a chief petty officer."

For civilian Harrison Page, the invitation was quite an honor and for Harrison Page, Chief Robinson of TV's "CPO Sharkey," it was an experience he won't forget.

In May, Page was invited to the Naval Technical Training Center, Corry Station, Pensacola, Fla., by the local CPOs to take part in a traditional initiation along with others joining the CPO ranks. After a 16-hour initiation, Page was the guest of honor at a dinner and was piped over the side as an honorary chief petty officer.

Page got a taste of the life of a real CPO during his stay. Before leaving, he told the CPOs, "I want to thank you again for having me here. Now that I've seen what the Navy is really like, I think now I can portray you in a true light as the humane people you are."

Final Flight for the A6A Intruder

The logbooks have been closed out, the last bomb has been dropped—an era has ended.

The "Arabs" of Attack Squadron 115, the last operational squadron to fly the Grumman built A6A *Intruder*, flew their final mission in an A6A from the deck of the aircraft carrier USS *Midway* (CV 41) in April to end this plane's 13 years of service to the fleet.

The A6A, first envisioned by the Navy in 1958 as an all-weather attack aircraft, made its initial flight in 1960 and was introduced to the fleet in 1964. During the Vietnam conflict, the A6A *Intruder* lived up to its role as the Navy's only all-weather aircraft. With its long range search radar, inertial navigation system and ballistics computer, the A6A was able to penetrate enemy defenses and deliver its payload when most other aircraft were weathered in. Manned by a pilot and bombardier/navigator, and capable of flying at low altitudes and high speeds, the A6A, *Intruder* carried a major load of the Navy's air war during its years in Vietnam.

The end of the A6A is not, however, the end of the "Arabs" of VA-115's role as the Pacific Fleet *Intruder* Squadron—it's the beginning of an era —with the newer and more reliable A6E.

'Jeff' May Become Marines' Best Friend

"Jeff" looks too awkward to fly, much less swim, but "fly" it did—with the aid of eight centrifugal fans. Jeff is the nickname for the Amphibious Assault Landing Craft (AALC), an air cushion vehicle being tested at Tacoma, Wash.

Although strapped down, or "anchored" in place, during initial testing, further tests in the Tacoma area this summer will check the craft's operation over open water.

Jeff's maiden lift-off was "highly successful" according to Lieutenant Commander Richard D. Greenamyer, the Navy project officer for the 170-ton vehicle designed to transport marine vehicles and cargo ashore in support of amphibious operations. Jeff is capable of carrying up to 60 tons of cargo at speeds up to 50 knots on a cushion of air over water or land. At about 60 per cent power the eight lift fans boosted the craft five feet off the ground during the test. The AALC, 100 feet long by 60 feet wide, is propelled by four seven-foot propellers.

Bearings

Four Rescued During Queen's Jubilee Review

Two days before the Naval Review, crewmembers from USS *Francis Marion* (LPA 249) rescued four persons, including a four-year-old girl, from the channel where the 150 ships were anchored.

Francis Marion's gig had just completed carrying guests to the nuclear attack submarine, USS *Billfish* (SSN 676), when the boat crew spotted a small powerboat overturned in the Solent Channel. They moved to the side of the capsized boat and brought the four on board.

The rescued—all British nationals—were taken to the nuclear-powered cruiser USS *California* (CGN 36), some 300 yards away, and attended to by the ship's medical officer. None were injured.

A boat from *California* retrieved the capsized craft, and examined it for hull damage. The cruiser's utility boat then took the four survivors to the Isle of Wight, with their powerboat in tow.

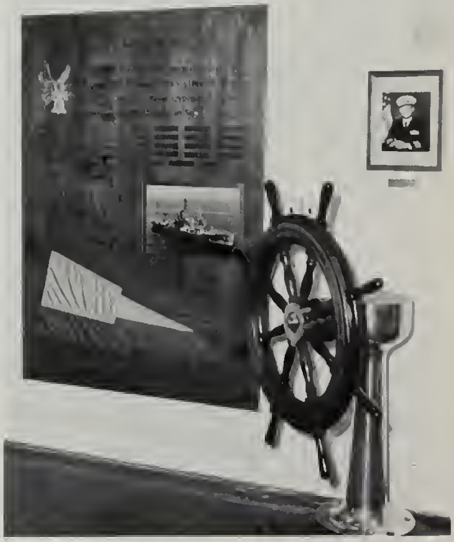
Liberty Crew Remembered

A memorial has been dedicated at the Naval Security Group headquarters in Washington, D.C., to honor the Technical Research Ship USS *Liberty* (AGTR 5) and 34 crewmen who died on board on June 8, 1967. Captain William L. McGonagle, *Liberty*'s commanding officer, and Mrs. P. M. Armstrong, widow of the ship's executive officer, unveiled the memorial listing the names and hometowns of the dead, a Presidential Unit Citation pennant, photograph of the ship, the ship's wheel, and photograph of Capt. McGonagle.

McGonagle (since retired), speaking on behalf of the crew, expressed pride in his men and their sacrifice. He said, "These are the kind of men who have made the Navy what it is today and what it has been through the years. They held important positions of trust, duty, and responsibility and they carried them out under the most trying conditions. . . ."

Liberty was the victim of mistaken identity and came under attack by Israeli air and naval forces in the eastern Mediterranean Sea during the Arab-Israeli War of June 1967. The attack and resulting struggle to keep the ship afloat took a toll of 34 killed and 170 injured.

McGonagle earned the Medal of Honor, four crewmembers received the Silver Star Medal, seven were awarded the Bronze Star Medal and two earned the Navy Commendation Medal for their roles in saving the ship and helping their shipmates.



the Navy's STAMP on history

BY LT. TOM DAVIS

From the dawn of maritime history, man has recorded his seagoing adventures in various art forms. Paintings, coins, sculptures and medals have all provided glimpses of seafaring life through the ages.

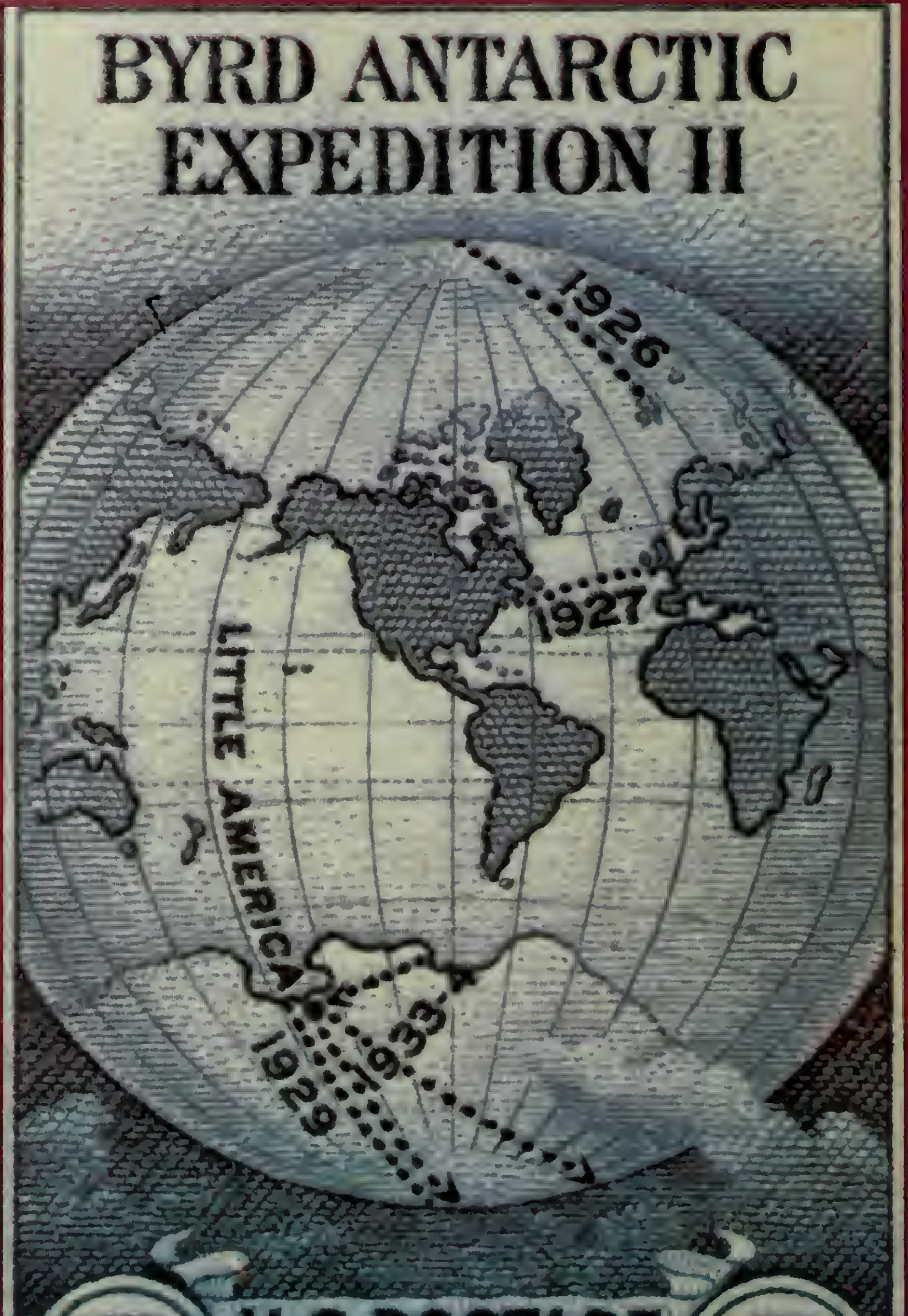
A relatively new art form appeared in Great Britain on May 6, 1840—the world's first adhesive postage stamp. Before this, letters were mailed "collect" and the recipient had to pay the postage. Adhesive postage stamps were inexpensive and provided for prepayment. The tremendous popularity of these experimental stamps led to the adoption of adhesive stamps by other nations; in 1847, the United States became the fourth country to issue them.

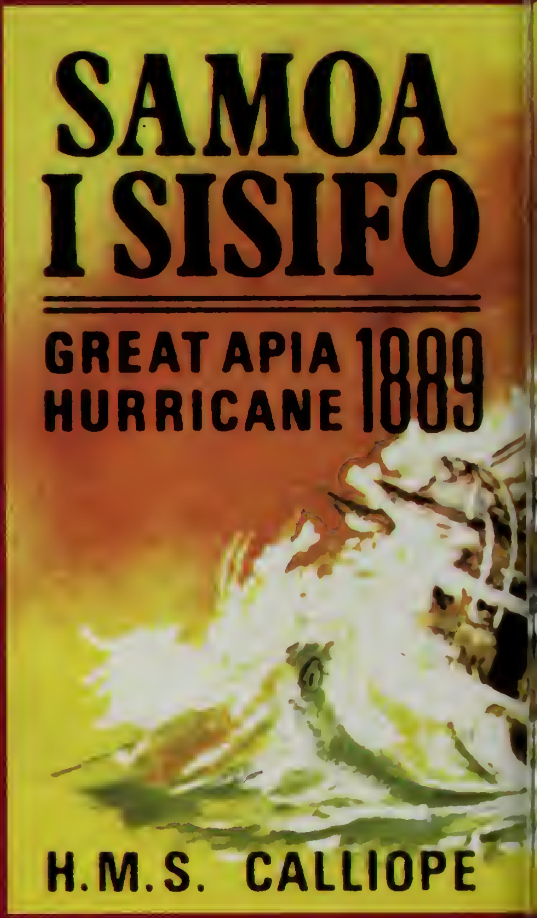
Persons, ships and events from the U.S. Navy's 200-year history have been variously depicted on U.S. stamps for more than 100 years. Exploits from the days of sail have appeared, as have events of the nuclear Navy.

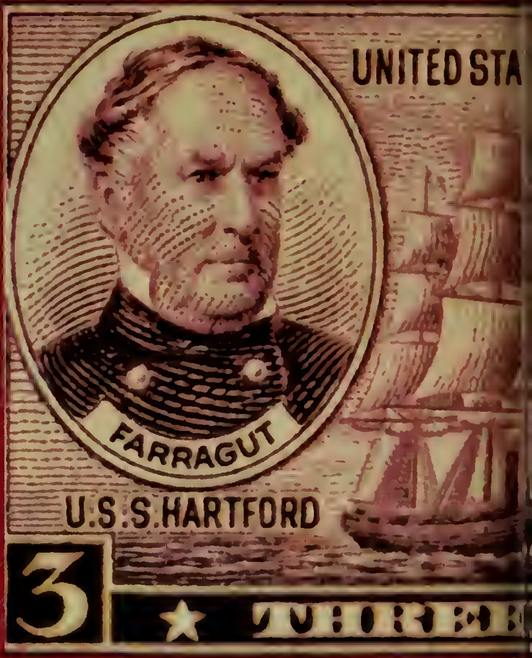
Foreign countries have also honored our Navy with postage stamp scenes lifted from American naval history ranging from the sinking of *Bon Homme Richard* to the battle between the ironclads to the Battle of Coral Sea.

Here, then, is a sampling of the U.S. Navy's rich and proud heritage—all on postage stamps of the world.

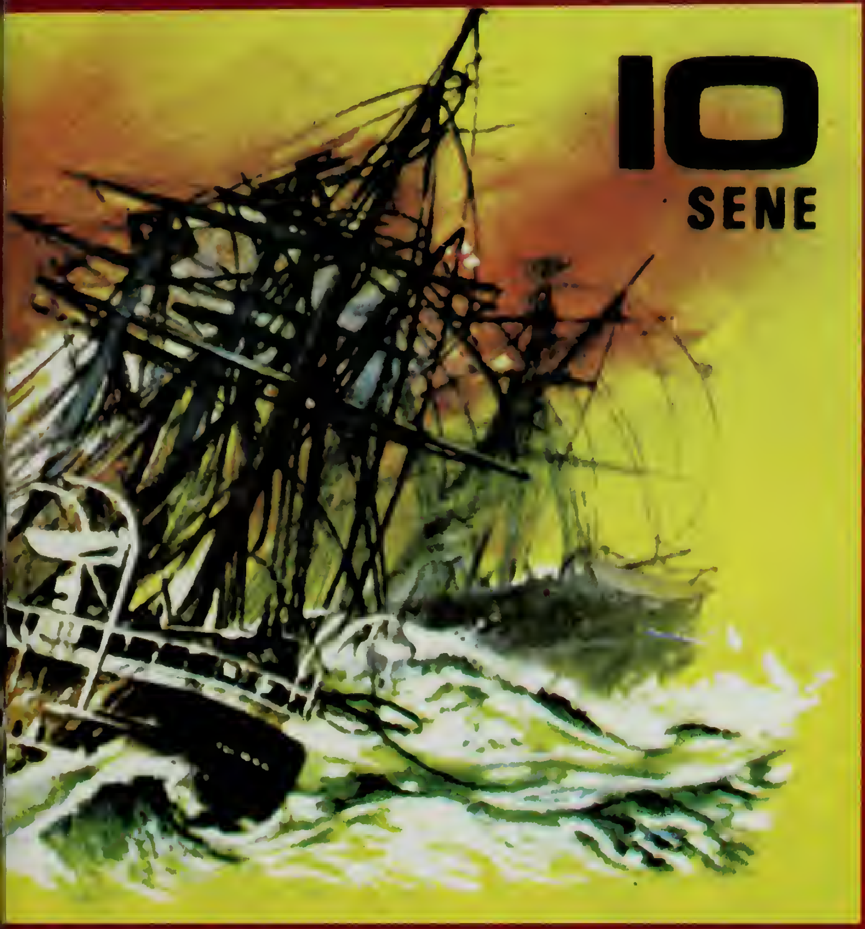
In 1933 the United States issued a three-cent postage stamp in conjunction with Rear Admiral Richard E. Byrd's second Antarctic expedition.





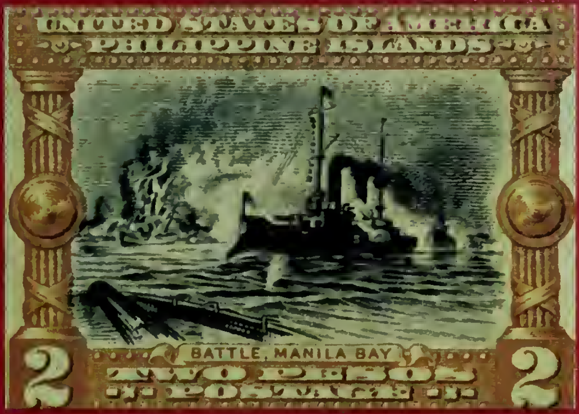


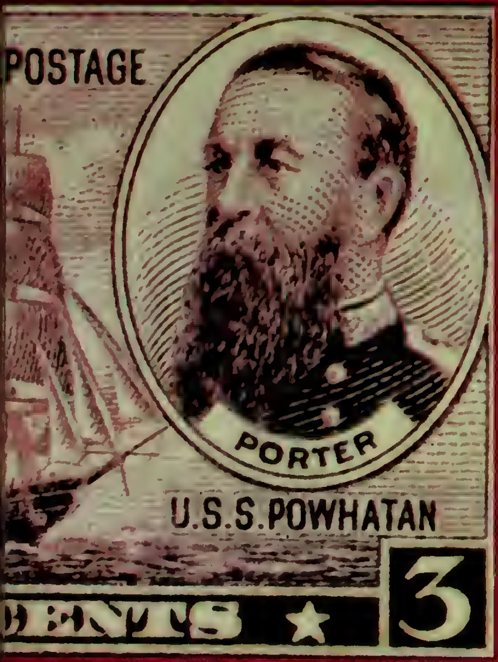
Admiral David G. Farragut and Admiral David D. Porter are both honored on this three-cent commemorative postage stamp issued as part of the U.S. 1936/37 Army-Navy issue.



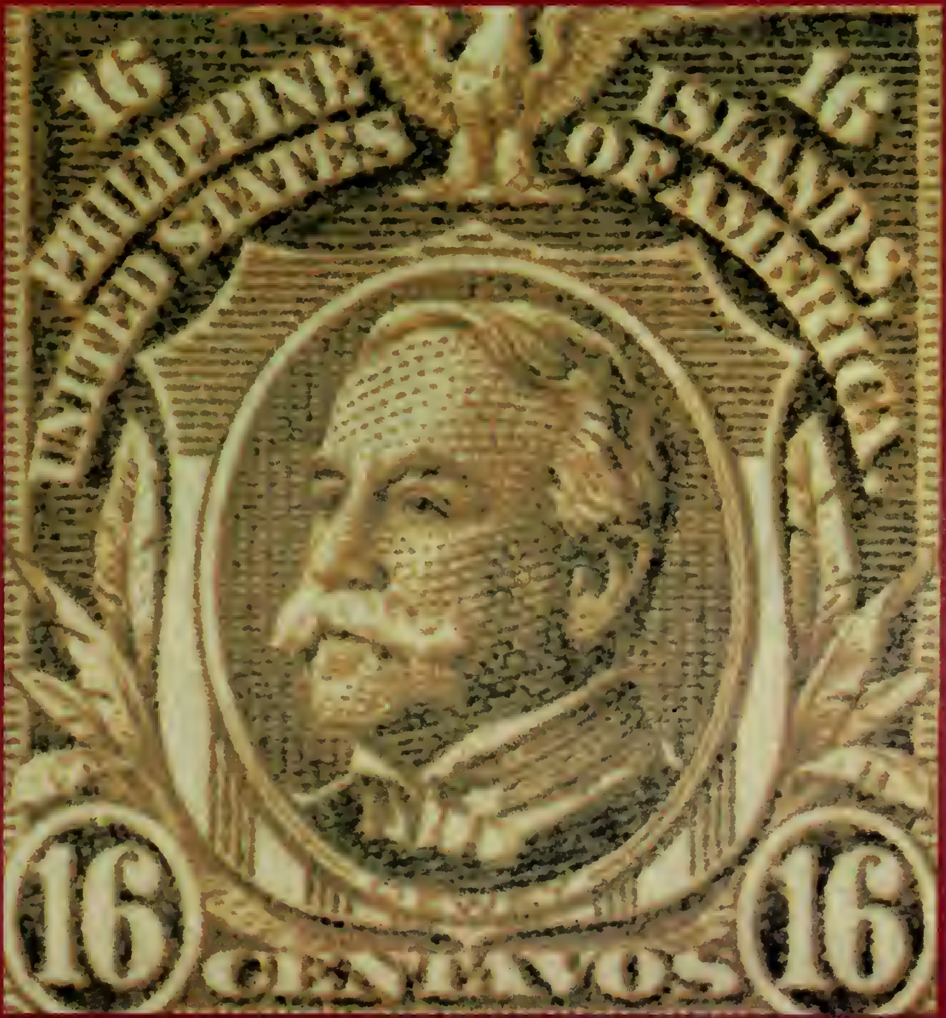
This 10-sene Samoan Hurricane Commemorative postage stamp shows the HMS Calliope *about to overtake USS* Trenton *during the 15 March 1889 hurricane which struck the Samoan Islands. During the storm, three American ships were lost—USS* Nipsic, *the gunboat* Vandalia, *and USS* Trenton*—as they, with four other ships, tried to put to sea.*

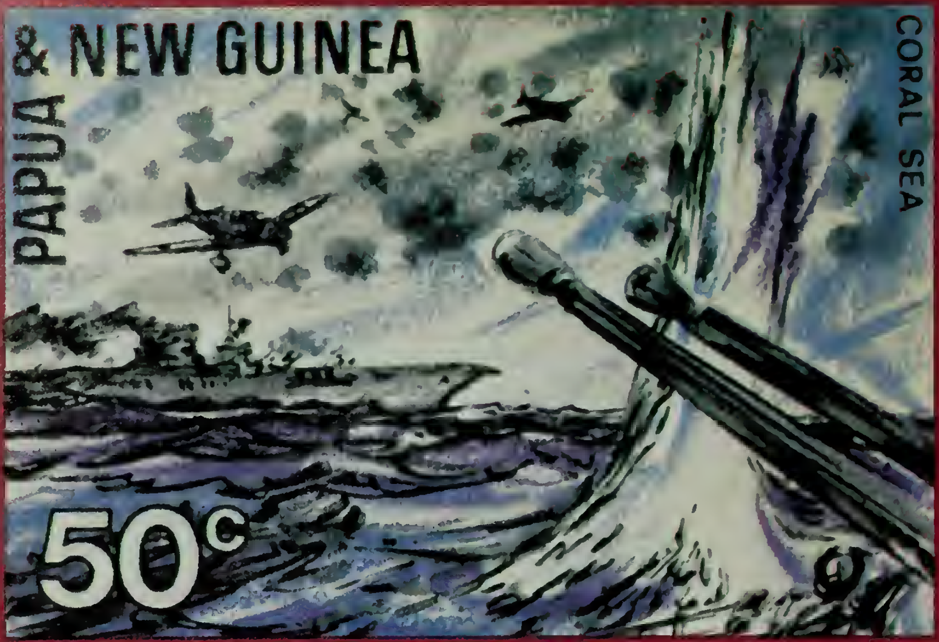
The Battle of Manila Bay was commemorated by a two-peso postage stamp issued by the Philippine Islands (under United States administration) in 1935. This stamp depicts the Asiatic Squadron, led by Olympia, *steaming past the Spanish fleet at the height of the 1898 battle.*





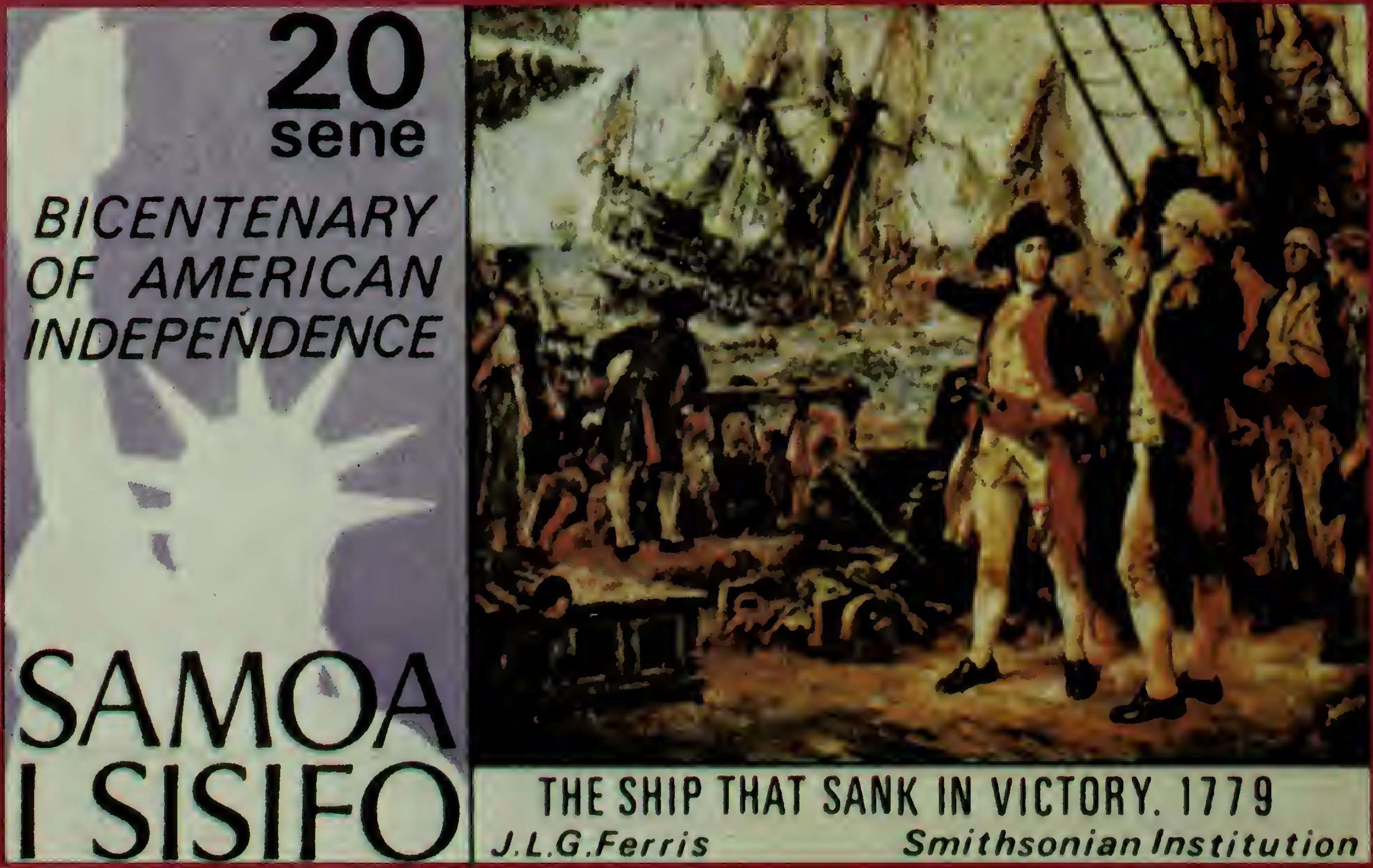
This 16-centavo postage stamp of Commodore George Dewey was issued by the Philippine Islands in honor of the Battle of Manila Bay in 1898.



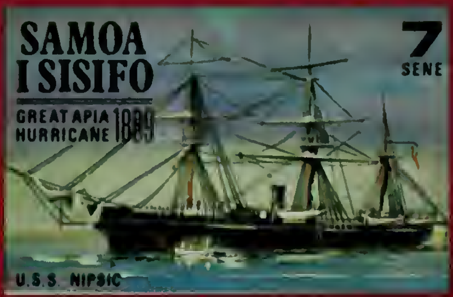


In August 1967, Papua and New Guinea issued four postage stamps to commemorate the 25th anniversary of the Pacific battles which ended Japanese attempts to take possession of the islands during World War II. One of those stamps, depicted here, pictures a moment from the Battle of the Coral Sea; Lexington *is under attack on the left.*

A romanticized painting of the sinking of the Bon Homme Richard *after the* Serapis *encounter provided the design for this 20-sene postage stamp. The 1976 commemorative issue of Western Samoa honors the American Bicentennial.*


20
sene
BICENTENARY OF AMERICAN INDEPENDENCE
SAMOA I SISIFO
THE SHIP THAT SANK IN VICTORY. 1779
J.L.G.Ferris
Smithsonian Institution

This seven-sene Samoan postage stamp of the 1970 Hurricane Commemorative issue pictures USS Nipsic, *one of the three American ships lost during the 15 March 1889 hurricane which hit the islands.*



Information Exchange

Q. *I am interested in applying for diver training and subsequent duty. Where do I find the requirements and procedures for applying for this duty?*

A. Enlisted personnel who are petty officers or identified strikers in any of the source ratings specified in the *BuPers Formal Schools Catalog;* and unrestricted line officers, lieutenant and below, interested in applying for initial diver training should request their command to arrange preliminary screening at the nearest activity having facilities to conduct:

a). Physical examination, in accordance with article 15-30, *Manual of the Medical Department.* (Any Navy medical facility with the capability of conducting annual or reenlistment physicals.)

b). Recompression chamber pressure test, to 50 psig (112 ft.). (AS, ASR, ARS, ATS class ship or a shore activity with an operable recompression chamber.)

c). Oxygen tolerance test, breathing pure oxygen at a simulated depth of 60 feet for 30 minutes (same locations as b).

d). A test dive in a diving suit, under the guidance of a qualified diving officer or master diver (AS, ASR, ARS, ATS class ship)or any shore activity having a diving facility.

e). Interview by a qualified diving officer or master diver, to ascertain the motivation and attitude of the applicant (same locations as d). Applicants must be at least first class swimmers, not over 30 years old, possess a combined MEC + ARI of 105 (or ASVAB: MC + AR = 105), and in paygrade E-3–E-6.

References that should be reviewed include *BuPers Manual,* article 1410380; *Manual of Medical Department,* article 15-30; and *BuPers Formal Schools Catalog* (NavPers 91761-A1), all available through the ship's personnel office.

Upon completion of preliminary screening, submit an Enlisted Transfer and Special Duty Request (NavPers 1306/7) to Chief of Naval Personnel (Pers 5112), via chain of command and EPMAC for approval. Submit Medical Forms SF-88 and SF-93 and interview recommendation as enclosures to the NavPers 1306/7.

For officers, submit application, with preliminary screening documents as enclosures, to Chief of Naval Personnel (Pers 412), via commanding officer.

Q. *Can active-duty Navy and Marine Corps members use civilian medical facilities at Government expense?*

A. Usually only in an emergency. Active-duty members are required to obtain their routine medical and dental care from a federal medical facility, even when the members are on leave or liberty. Federal medical facilities are those of the Army, Navy, Air Force, U.S. Public Health Service and Veterans Administration.

The Navy will not pay for routine care obtained from a civilian source unless prior authorization has been given by the cognizant Naval district medical or dental officer. Specifically, the Navy will not pay for civilian care if it is obtained after an emergency is over, because of personal convenience, or because of personal preference.

The Navy will not pay for civilian care provided to an unauthorized absentee unless the member returns to the actual or constructive control of a military authority before the care is completed.

These rules are spelled out in BuMed Instruction 6320.32B. General guidance is given on the reverse side of your leave papers.

Q. *What kind of operations are carried out by Military Sealift Command (MSC) cargo ships?*

A. MSC operates both dry cargo ships and tankers. They deliver all types of military cargo to worldwide ports serving the Armed Forces. They regularly support bases in the Arctic and Antarctic, Europe, South America, the Far East, anywhere U.S. Forces are stationed. They call at as many as 500 world ports, many of which are seldom visited by Navy combatant ships. In addition, the MSC tankers which normally are involved in point-to-point deliveries, often make consolidations or provide unrep services to MSC oilers or combatant fleet ships.

Q. *I have used my 36 months of VA educational entitlement but I would like to go to graduate school. Do I have any entitlement left?*

A. Effective Oct. 1, 1976, eligible personnel who have served 18 continuous months or more on active duty since Jan. 31, 1955, become entitled to 45 months of educational assistance if they have not been separated for more than 10 years.

Q. *Is it true that veterans who served after World War II and before the Korean Conflict are now eligible for home loan benefits?*

A. Effective Oct. 1, 1976, those with active duty after July 25, 1947 and before June 27, 1950, who served more than 180 days under conditions other than dishonorable or were discharged with less than 180 days because of a service-connected disability, became eligible for VA home loan benefits.

from Seaman to Admiral

Reflection on a 40-year career

This is how Seaman Recruit Sackett appeared in 1937 as he prepared to stand watch during his recruit training at Great Lakes.

BY KEN SINCLAIR

When 17-year-old Albert Monroe Sackett followed the advice of old salts back home in the farming community of Victor, Iowa, he joined the Navy to see the world. All he planned to do was "put in his twenty and retire as a chief petty officer."

Al Sackett achieved these ambitions and then some. Not only did he do his "twenty," he stayed around for a second twenty. Not only did he make chief petty officer, he achieved the rank of rear admiral.

At the time of his retirement he was believed to be the only flag officer on the active list who had progressed through every pay grade from seaman recruit to rear admiral. Rear Admiral Sackett concluded his career at the same place he had started it in 1937—at the Great Lakes Recruit Training Command. He was piped over the side during traditional retirement ceremonies on July 1 after receiving the salute of the graduating recruits as they passed in review.

Admiral Sackett said he stayed in the Navy because of the challenge. He achieved his first goal when he made chief in 1944. With World War II came a need for additional officers as well as trained, experienced shipboard personnel; an opportunity to become a temporary officer developed for then-Chief Machinist's Mate Sackett.

"Naturally chiefs were among the first considered for the wartime officer program," said Sackett. "I was commissioned ensign and assigned as engineering officer aboard USS *LCI (R), 74* (Landing Craft, Infantry) in 1944. Six months later I was executive officer and by the time the war was over I was commanding officer of a landing craft (infantry) ship."

After the war, then Chief of Naval Personnel Vice Admiral James Holloway (father of the present Chief of Naval Operations), created what came to be known as the "Holloway Plan" whereby temporary officers could apply for permanent commission. Personnel strengths remained greater than anticipated after the war, so some former enlisted personnel and reserve officers could apply for regular commissions. Sackett applied, was accepted, and went regular in 1946.

Although he had only a high school education this did not prevent the energetic young officer from climbing the promotion ladder. It was not until very late in his career that he was sent to George Washington University for four semesters and thereby earned a B.A. degree.

Becoming an admiral was not part of Sackett's plans. He noted that "after I reached the rank of captain there was a time I thought I would never reach flag rank. I was one of the more senior captains when I was selected in 1970—for everyone selected there were a couple more who were equally well qualified."

Admiral Sackett recalled the words of the president of his flag selection board, Admiral Ralph Cousins, who said, "If you make the rank of commander in this man's Navy you have had a good career. If you make captain, you've had an excellent career. If you make admiral, you're lucky."

Sackett's career pattern undoubtedly contributed to his "luck" in being selected. He had commanded numerous ships including an LCI (R); LSM 109; LST 990; the Destroyer USS *Preston* (DD-795); the Guided Missile Destroyer USS *John King* (DDG-3); and the Cruiser USS *Gridley* (CG-21). His last assignment was as Commandant Ninth Naval District and Commander Naval Base Great Lakes. Before that he commanded the Navy Destroyer School and served as the Navy's Chief of Technical Training.

As a senior captain, he headed the Bureau of Naval Personnel's Officer Distribution Division, where he was responsible for the duty assignments of 72,000 officers in the Navy.

The admiral observed numerous changes in his 40-year career, among them being the shift from conventional to nuclear power and the adoption of the chief petty officer's uniform for all enlisted personnel. He noted that the latter change is now being re-considered and there may be a reversal to the old bell-bottom uniform yet in the cards. (Note: Since enacted by CNO.)

Another change currently being considered which particularly intrigues Admiral Sackett is the possibility that women may serve aboard ships other than auxiliaries. The admiral chuckled as he said, "It may have a traumatic impact on the Navy if it is allowed, but, if it comes, it will be worked out just as so many other changes have been.

"Now," he said, "women are serving in nearly every rating specialty in the Navy, including machinist's mate, engineman, boiler technician and even avionics technician. One factor which will greatly determine where and to what extent women will serve aboard combatant ships will be the Navy's population pool 20 or so years from now.

"Population planners say there will be a significant drop in the number of eligible males available for the Navy in the 1980s. Whether we fill those possible vacancies with women is hard to tell right now.

"Leaving the Navy was an emotional decision for me," admits Sackett. "I intend to be very supportive of Navy recruiting efforts in the future. I think it's the responsibility of everyone to motivate young people to serve the nation.

"Naturally, being parochial, I say Navy. There are opportunities for education, advancement and vocational training."

During his retirement ceremony, Admiral Sackett addressed the recruits who graduated that day from the Great Lakes Naval Training Center. He reminded them that—40 years before—he had stood where they were standing. He urged them to be hard working and dedicated and advised them to choose their friends wisely.

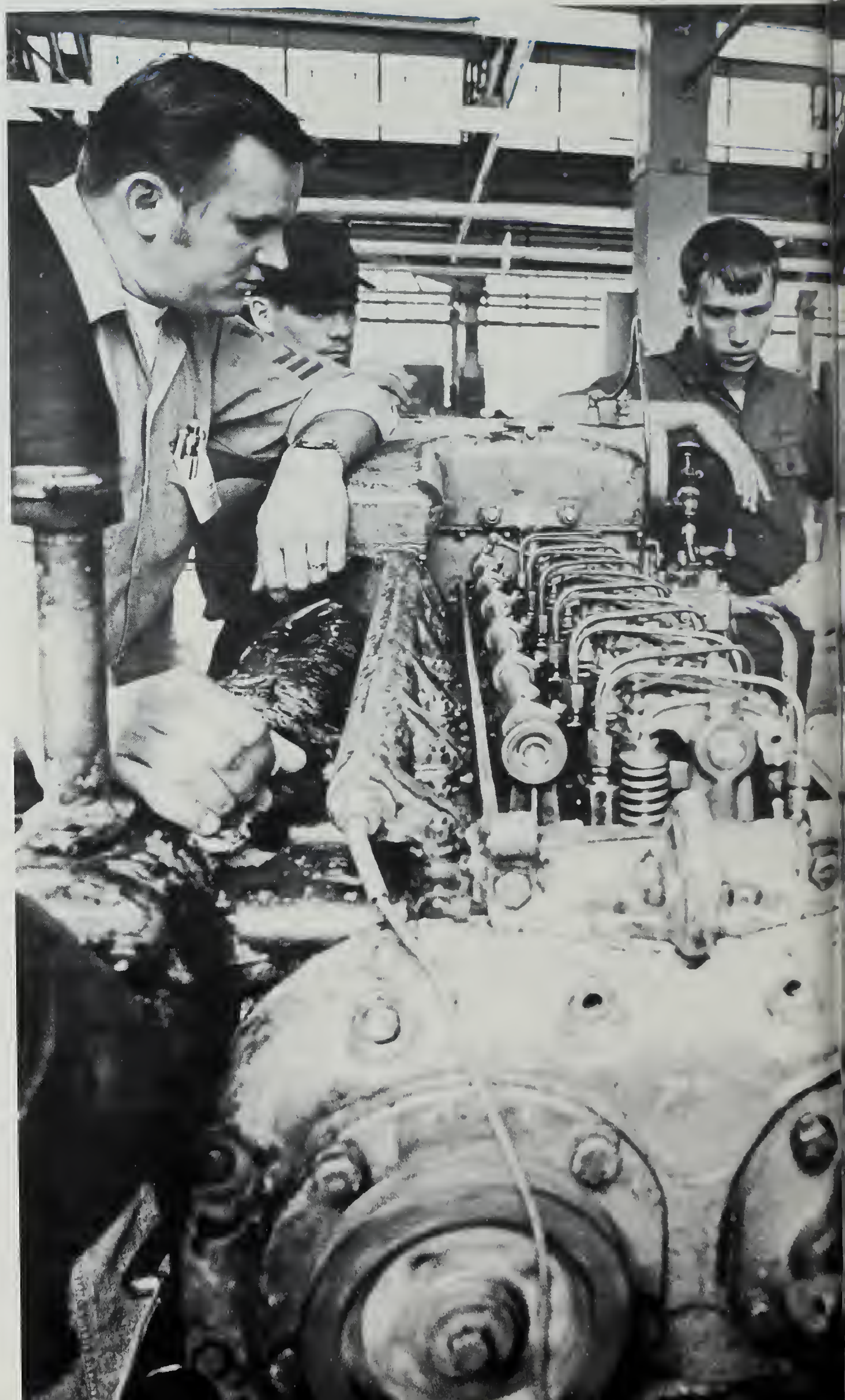
Upon retirement Admiral Sackett moved to Memphis, Tenn., where he joined a college staff as development director. He considers his second career position to be yet another opportunity to assist young people.

Al Sackett took great pride in having been both a chief petty officer and an admiral. He was a smalltown kid who came off the farm with a high school education and worked his way to the top rungs in the Navy. ⚓

Rear Admiral Albert M. Sackett, accompanied by his wife Patt, is "piped over the side" at the conclusion of his forty-year naval career. Admiral Sackett retired at Great Lakes where he commenced his career in 1937 as a seaman recruit. His terminal assignment was as Commandant Ninth Naval District and Commander Naval Base Great Lakes.

Learning to

Propulsion Engineering School



Engineman Fireman Apprentice Michael Sperry's nervous hands twist the screwdriver against the governor buffer screw to smooth out the erratic idle of the G-71 GMC diesel engine.

smile at growls

BY PH1 TERRY C. MITCHELL

The starter whirred the diesel engine into a throaty erratic growl and immediately the learning supervisor, Engineman 1st Class Joseph Strafford, shouted, "Check the oil pressure." Assuring his supervisor the pressure was up, Engineman Fireman Apprentice Michael Sperry moved to adjust the governor buffer screw; nervous hands twisted the screwdriver against the screw until the growl became a smooth, consistent idle.

Smiles came quickly to the faces of Sperry's classmates—it ran, it actually ran! For the past few days they had labored over, under and in the 6-71 GMC diesel, adding to the sheen of wear with their hands and wrenches. Strafford shut the engine down and turned the screw back out of adjustment for the next man.

Across the way, in another building, Machinist's Mate Fireman Apprentice Steven Dahl traced a white, lagged pipe throughout a maze of valves and piping, looking down only to check his footing. Spotting the elusive valve, he strode confidently to it, checked the number and made the entry in his book.

Dahl was finished tracing the circuitous route of the 150 pounds per square inch (psi) steam line.

Both Sperry and Dahl are attending the Propulsion Engineering School, Service School Command, at Naval Training Center, Great Lakes. Each started in common core classes learning theory, then applying it in job-practice laboratories. Everything from simple nuts and bolts (called metal fasteners by the professionals) to pumps, purifiers, compressors, heat exchangers and of course oil pollution. The tools of the trade are reviewed and used in laboratories full of globe valves, centrifugal pumps and metal fasteners.

The common core classes are self-paced with each individual demonstrating satisfactory performance of every skill objective before progressing to the next lesson.

After approximately 20 days of the common core classes, the students complete Module 13 and begin to go their separate paths of learning. Enginemen, like Sperry, go on to study the intricacies of controllable pitch propellors, fire mains, reduction gears and the diesel engine.

The diesel engine receives most of their attention. Lube oil systems, air intake systems, fresh and salt water cooling systems—every nut, bolt, bearing and component is studied to ensure the proper function of each is understood by the student.

Each group of four to six work together disassembling one of the laboratory's 6-71 diesel engines. Once the engine is apart, the students use measuring devices to check for wear on the main bearings, pistons and cylinder sleeves. The resultant measurements are compared to the past findings of other students to ensure accuracy. The measurements are necessary to help

the student learn the signs of wear and predict possible future breakdowns. Given the go-ahead from the learning supervisor, the group then reassembles the engine. When the first growl of the engine is heard, the smiles come quickly along with a few pats on the back.

"Most of the students have been backyard mechanics. Some have even held jobs as mechanics, but we had some that didn't know the intake from the exhaust," one learning supervisor remarked. "After they are through here, each knows the basics of the diesel engine."

Learning the basics of maintenance and operation is a prerequisite to the use of the diesel as a means of propulsion. Every engineman is indoctrinated as Engineman Messenger of the Watch and Engineman Petty Officer of the Watch. The watches consist of more than watching the engines run. Simulated casualties of the engine's various systems keep the watch standers on their toes. The casualties and the watches give the student a taste of what a watch may be like in the fleet.

Much like the Enginemen training on working diesels, Boiler Technicians and Machinist's Mates train on functioning power plants. BTs and MMs are classified according to fleet needs, either as 600-psi or 1200-psi operators, leading the learning supervisors to speak of their men in terms of "He's a 600-lb. MM" or "he's a 1200-lb. BT"—no connection with their body weight.

Each BT or MM begins by learning the functions of the boiler and its components in the generation phase of the main steam cycle. Tracing the various pipes, pinpointing different indicators and finding the right valves are all a part of the learning process in both plants.

The learning process is formulated by three sources, the foremost being the Personnel Qualification Standards (PQS).

PQS outlines the areas of knowledge and skills required to operate propulsion engineering components and systems. In addition, it outlines the watch standing tasks for both rates. PQS takes the student to virtually every nook and cranny of the boiler and engine rooms. Master Chief Machinist's Mate (SS) John Woods puts it, "PQS gives the total picture of what is happening on both sides of the bulkhead." Learning what goes on in both the fireroom and the engineroom is vital in order to operate a propulsion plant efficiently and safely.

Once the systems and components are known, the student is ready for the operation of the plant.

Operation of a propulsion plant has a beginning, a middle and an end which translates into the Engineering Operational Sequencing System (EOSS). Much like the pilot's checklist before a takeoff, EOSS gives the MMs and BTs the proper sequence of operating a plant from start to finish.

"Most of the students have been backyard mechanics."

"Opening a valve or bringing a pump on the line at the wrong time could cause damage to the plant or the personnel operating it. That's why EOSS is important to both the plant and its operators," according to Machinist's Mate 1st Class Richard DeCoster, one of the Tomich Facilities' learning supervisors.

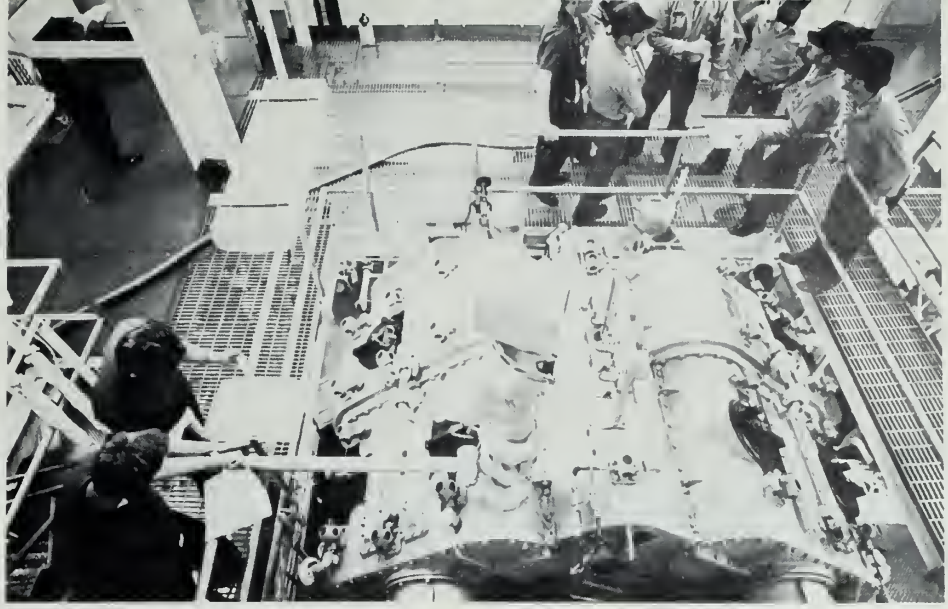
Operation of machinery takes its toll in wear and tear. Spotting the wear and preventing the tear is accomplished through the Preventive Maintenance System (PMS).

Each student is taught to perform preventive maintenance actions on the E-3/E-4 level using the various maintenance requirement cards for the common types of propulsion engineering machinery. Essentially every moving part and the vast majority of immobile parts must be checked for signs of wear or possible breakdown.

Knowledge and performance are brought together when the MM or BT goes through his watch indoctrination.

Watch indoctrination of the 600-lb. plant for the BT means eight hours of watch standing as the checkman at the upper level fireroom, eight hours as blowerman, eight hours as burnerman at the lower level fireroom and eight hours as the fireroom messenger of the watch.

"These watches are intended to give the student the basics of the various watch stations," said Chief Woods. "Most of our graduates must stand more indoctrination watches once they get to their ship just to learn the idiosyncracies of that particular ship's plant."



The more complicated 1200-lb. system requires more indoctrination and watch standing. 1200-lb. BTs spend three 8-hour watches in the fireroom's upper level acting as checkman, blowerman and feed systems operator in addition to three 8-hour watches on the lower level as burnerman, port and starboard systems. Two more 8-hour watches as the fireroom messenger of the watch and the student is graduated to his assignment in the fleet.

"PQS gives the total picture of what is happening on both sides of the bulkhead."

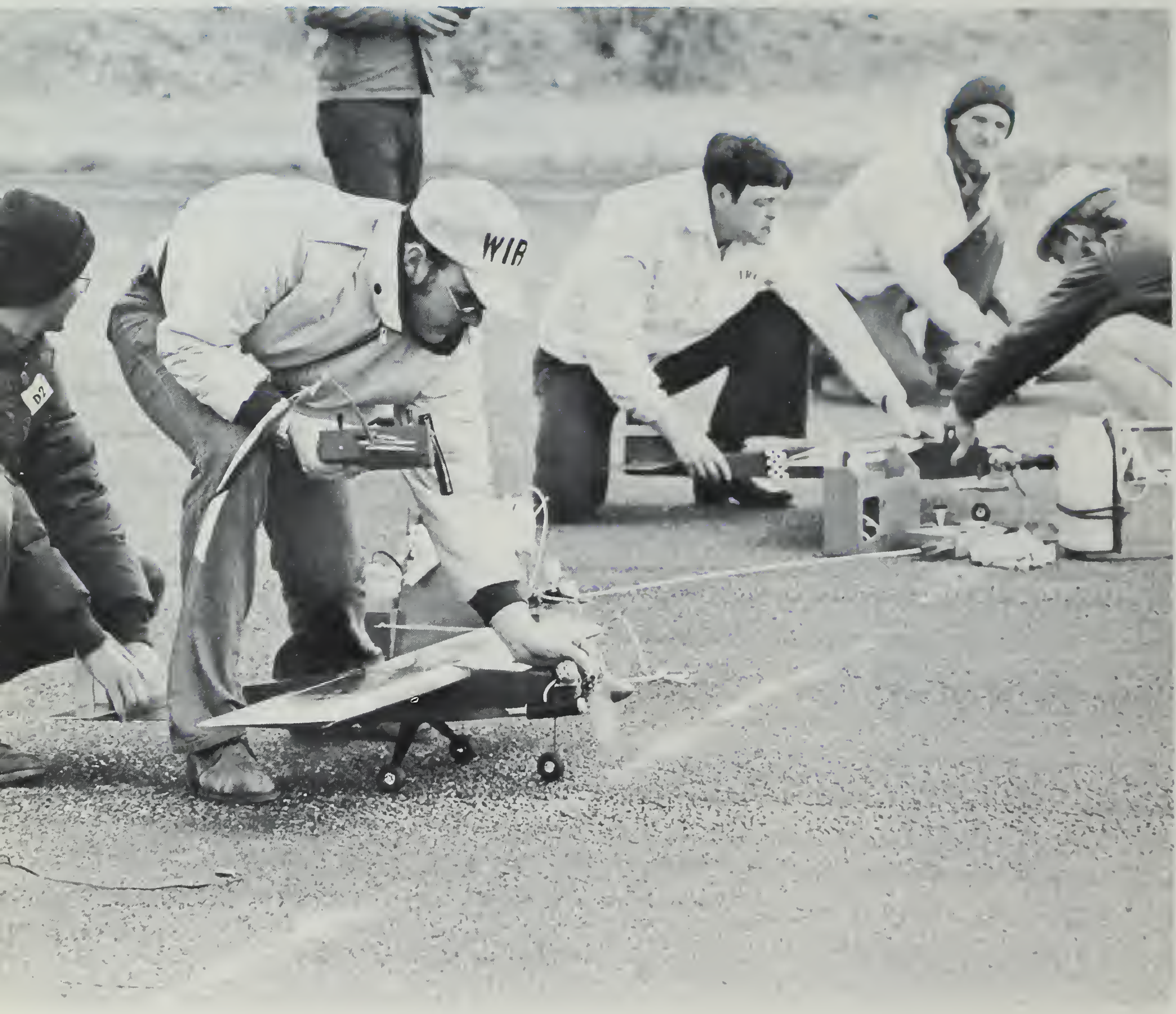
The MM must complete a combined 40 hours of watch standing in the engineroom lower level, at the throttleman position, with the ship's service turbogenerator and as engineroom messenger of the watch in the 600-lb. plant. As with the 1200-lb. BT, the 1200-lb. MM also stands more watches in order to learn the more complicated 1200-lb. system. In addition to two 8-hour watches as messenger, students stand 8-hour indoctrination watches on the lower level, upper level, throttleman and ship's service turbogenerator.

Watch standing at the school is made to approximate, as closely as possible, standing underway watches on a ship. Both plants use huge water brakes to transmit the feeling of the screws in the water and the various loadings at the different shaft speeds. The inherent heat of the spaces matches that found aboard ship.

"We try to duplicate everything here that would be found aboard a ship," DeCoster concludes. "But we fall short on two things—we don't get under way and we don't have the rocking of the ship." Plenty of time for pitching, rolling and yawing after these graduates join the fleet.

Opposite page: Using the lower level fireroom as a classroom, Chief Boiler Technician Jerry Rutter talks to his students about the Aqueous Film Forming Foam (AFFF) system used for fighting fires at this watch station. At left: Machinist's Mate 1st Class Dan Newman conducts a lecture on the throttle watch in the console booth of main control. Above: As new students receive their introductory tour from their learning supervisor, two other students work toward completion of their watch indoctrination lessons beside the main reduction gear.

Groundbound Pilots



The airspace above the airstrip is crowded with looping, diving and banking airplanes. A wrong move or awkward maneuver can send one of the small aircraft plummeting out of control toward earth and certain destruction. The pilot is concerned for the safety of his airplane. He doesn't worry about his own welfare, however, as he puts his machine through its paces . . . from the ground using remote control.

The groundbound pilot is Aviation Structural Mechanic 1st Class Scott Cedergreen, assigned to VA-128 at NAS Whidbey Island, Washington.

When Cedergreen became interested in radio-controlled flight two years ago, he began looking for someone to teach him the fine points of flying his plane. During his search for such an expert, Cedergreen found others interested in the hobby and formed the Whidbey Island Radio Control Society. Members drafted by-laws and instituted rules for club competition, limiting the size of planes and engines which could be used.

Cedergreen said: "The hobby can get expensive and this turns many people off. Kits start at $19 but can run as much as $200. Still, it's a one-time cost."

The hobbyists spend their weekends working on, testing and flying model planes in preparation for upcoming races. The Whidbey Island club members compete with other clubs throughout the year. A point system, similar to auto racing, is used and the member with the most points at the year's end is ranked number one.

Although still a novice, Cedergreen said, "I've learned many of the dos and don'ts by talking to other club members." With the planes flying at 75 or 80 miles per hour, any wrong move can cause the planes to crash.

Before a race, Cedergreen flies the plane to get out the bugs. Then it's pure competition until the horn at the end of the race. ⚓

Mail Buoy

About Little Rock

SIR: I would like to put the record straight. Your article "Busy Ship Right to the End," (January, '77) stated USS *Little Rock* was the only foreign warship to take part in the reopening ceremonies of the Suez Canal in June 1975. How did your correspondent miss HMS *Abdiel,* HMS *Hubberston* and HMS *Sheraton* who were in the Canal doing the final clearance from April 17th, 1975, to June 6th? HMS *Abdiel,* the Royal Navy Support Ship was also there for 7 months in 1974 along with USS *Barnstable County* and USS *Boulder County.* The French Navy also had at least one mine sweeper present in Lake Timsah on opening day.—MAA J.S.P., RN.

• *You are correct in citing the other foreign ships which took part in the opening ceremonies. Unfortunately, the erroneous information was provided* ALL HANDS *by an outside source and not challenged.*—ED.

Screening Films

SIR: In the March 1977 issue of ALL HANDS, the Information Exchange feature on page 40 failed to mention one very important fact regarding selection of films for the Navy Motion Picture Service. Being a member assigned in BuPers, I have had the opportunity to "preview" movies pending input. I think it is of interest to Navy personnel that Navy men and women (officer and enlisted) preview every movie before approval for purchase. Comments, good and bad, with appropriate ratings, are made by each member viewing them. Movies are very expensive and this method of screening affords a general consensus of interest or acceptability for their Navy-wide distribution.—DPC C. A. Howe

Yangtze River Patrol

SIR: "Grains of Salt," in the March issue, appears to be a competent book review without naming the title: *Yangtze Patrol and the U. S. Navy in China,* which described on the dust jacket, ". . . covers a century of Chinese history, replete with warlords and mandarins, bandits and kidnappers, missionaries and mercenaries, and riot, rape and revolution." Recently out of print, the book should still be in the Navy library system for those who would like to delve deeper into the lives of the Old River Rats. It has also been put into cassette form by the Library of Congress for country-wide distribution in libraries of talking books for the blind and physically handicapped.—RADM Kemp Tolley, USN(RET)

• *Rear Admiral Tolley should certainly know. He is not only historian of the Yangtze River Patrol Association but also wrote* Yangtze Patrol and the U. S. Navy in China, *published by the U. S. Naval Institute.*—ED.

Computerized Detailing

SIR: Why can't detailing of personnel be computerized? The Navy has the computer capability of computerized detailing. In today's Navy everyone has his name and different items already in the computer. The computerized selecttion would be fairer and would save manpower and expense to the Navy. It would also eliminate guesswork and personal feelings in the detailing of personnel. The Bureau could still have some detailers for special programs, and reenlistments and assign the other detailers to other billets.—PN1 A.D.D.

• *BuPers tells us that from 1966 to 1973 the Navy did research and prototype development to test the feasibility of fully automating the enlisted personnel detailing process. The Computer Assisted Distribution and Assignment (CADA) System was designed to match available personnel with requirements (by rate, rating and NEC) in accordance with policy guidance (BuPers Manual, Enlisted Transfer Manual, instructions/notices, etc.) resulting in a set of enlisted orders. Problems were encountered with the excessive computer time required and the significant numbers of matches the computer could not resolve. Besides the difficult cases with complex variables, many others required decisions regarding personal situations of individuals which only a human being could make. The combination of these factors resulted in the elimination of the CADA System. Many facets of centralized detailing today do involve the assistance of computers from the production of management reports to the issuance of orders. The Chief of Naval Personnel decided to employ members of all ratings as detailers for members of their occupational specialty since that system was considered to be superior to an impersonal automated process. The annual detailer trips to the Navy's many homeports throughout the world where enlisted personnel can discuss their future assignment face-to-face with their detailer have been an outgrowth of this decision to make enlisted detailing a more personalized procedure.*—ED.

Marines at Tangier

SIR: Referring to a recent TV network show, "The Wind and the Lion," they had one scene showing the landing of the Marines in Morocco with a squad of Navy personnel with machine guns. Supposedly, this took place in 1908. I want to know why the squad was with the Marines, and if they were corpsmen, why the machine guns?—CM2 C.J.Q.

• *We have been informed by the Naval History Division that the event referred to in your letter actually occurred in 1904. On June 8th of that year, Marines were landed at Tangier, Morocco, to protect the Belgian legation from attack by tribesmen. At the same time, an American citizen, Ion Perdicaris, was being held captive by a Moroccan bandit. There was no mention in the account of sailors being in this landing party. However, it was not uncommon for sailors to be used in landing parties.*—ED.

USS Norton Sound

SIR: In reviewing your June, 1976 issue ("For The Navy Buff"), I came across an interesting article on page 53 concerning "floating missile test launchers," or as we prefer to say, RDT&E ships. As commanding officer of USS *Norton Sound* (AVM 1), I was extremely pleased to see her mentioned; however, sad to note that reference was in the past tense.

As old as *Norton Sound* is (she was originally commissioned in 1945) she is still very active in the Research, Development, Test and Evaluation community. Currently, she is involved in conducting operational tests of the *Aegis* system. *Norton Sound* not only "was" but still "is" in the forefront of the RDT&E Program.—CDR D. B. Dickmann.

- *Since we inadvertently spoke of* Norton Sound *in the past tense we've learned that she is very much alive and well. As a matter of fact,* Norton Sound *figured prominently in our ongoing coverage of the AEGIS system development as readers of the November '76* ALL HANDS *and Chinfo Newsgram are aware. In addition we've made note of* Norton Sound's *continuing contribution in our "Backgrounders" that are sent to retired and Reserve flag officers each month.* ED.

Visit to Alexandria

SIR: The January 1977 issue of ALL HANDS contained an article stating the renowned USS *Little Rock* (CG 4) was "the first U.S. warship to visit Alexandria, Egypt, since World War II (See "You Know It's The End of a Ship When . . . ").

If my memory serves me right, USS *Soley* (DD 707), now with the mothball fleet, was the first U.S. warship to visit Alexandria, sometime in early 1962. I was then attached to *Soley* when we tied alongside a pier at Alexandria, to pick up needed U.S. AID supplies bound for the stricken people of Kenya, Africa.—DK1 F. C. D. V.

- *We throw your counterclaim out to our readers from* Little Rock *or any other ship that thinks they may have been the first to reach Alexandria, Egypt, after World War II. Any other claims?* —ED.

Largest Reservation?

SIR: Your April 1977 issue claims that the White Sands Missile Range is the "largest land-area military reservation in the United States." Depending on your definition of "military reservation," the largest could be Naval Petroleum Reserve Number Four on the North Slope of Alaska which encompasses some 37,000 square miles.—LCDR A. E. Corcoran

- *On the surface, it looks as though you win by some 33,000 square miles. White Sands Missile Range will have to bow to you on this one.*—ED.

Ye Ole Frocking

SIR: As a history buff of the U.S. and British navies during 1775-1850, I think I may have a plausible explanation for the term "frocking" mentioned in a recent "For The Navy Buff" article:

I have found that when a ship lost an officer, either through death, injury or as prize officers of captured vessels, commanding officers usually would fill these voids with midshipmen who had passed the lieutenant's exam. These midshipmen were appointed "acting lieutenants," wore the frock (coat) of a lieutenant, were called lieutenant and had a lieutenant's authority. However, their commissions were pending the approval of the Admiralty or Congress.

Since a midshipman usually wore a short jacket, it seems he was thus "frocked" to lieutenant but without the pay until authorized.—JO1 M.J.K.

- *Anyone else out there got any ideas?* —ED.

Warrant Retirement

SIR: I enlisted in the Navy on 21 Aug. 1963 and was appointed a W-1 in June 1972. In June of 1974, I was appointed a WO-2 and in April 1975 I was appointed a LTJG (Temporary) under the LDO program with a permanent grade of W-2.

(a) Must I have 10 years as an officer to retire as an officer?

(b) What will I be retired as if I retire after 20 years of service?

(c) Under current law, when can I retire as an officer if not (a) or (b) above.—CWO G. E. LeB.

- *Naval officers must serve at least 10 years as a commissioned officer in order to retire under 10 USC, Sec. 6323, in a commissioned officer grade. Under the provisions of 10 USC, Sec. 1292, a temporary or permanent warrant officer may retire after completing 20 years of active service. Under 10 USC, Sec. 1293, a warrant officer is placed on the retired list in the grade in which serving unless he has served in a higher temporary grade. In that instance, he is retired in his permanent warrant grade and advanced on the retired list to the highest grade satisfactorily held, as determined by the Secretary of the Navy under 10 USC, Sec. 6151.*—ED.

Grade at Retirement

SIR: Is there a rule or regulation that says if a man is determined not medically qualified as a result of an advancement physical exam, then he would be retired in the pay grade to which he was scheduled to be advanced?

- *Yes. In cases of the nature described above, Title 10 USC, Section 1372, is applied: "Unless entitled to a higher retired grade under some other provision of law, any member of an armed force who is retired for physical disability under section 1201 or 1204 of this title, or whose name is placed on the temporary disability retired list under section 1202 or 1205 of this title, is entitled to the grade equivalent to the highest of the following: . . . (3) The permanent regular or reserve grade to which he should have been promoted had it not been for the physical disability for which he is retired and which was found to exist as a result of his physical examination for promotion."*—ED.

Fireman to PO2?

SIR: Would you please tell me when the Navy changed its rating system to include PO3? I understand that at one time the ratings went from Fireman or Seaman to PO2—H. F. Shaffer.

- *The engineering ratings once went from Fireman to second class petty officer. These ratings were re-evaluated in 1926 and the third class petty officer rate was established at that time.*—ED.

Desert Navy

SIR: After reading your April 1977 article, "The Desert Navy," we of the Navy Technical Assistance Field Team (TAFT), Bushehr, Iran, would like to place ourselves on the list of "Desert Navy" organizations. With teams throughout Iran in some of the world's most desolate regions, the Navy TAFT provides vital advisory services to the Imperial Iranian Navy and Air Force on the technical application of many aviation and ships' systems.—LT J.H.K.

Proper Title

SIR: Is the proper title for warrant officer designator 714X: Repair Technician *or* Ship Repair Technician?

- *The proper title for the warrant officer designator 714X is: Repair Technician (Surface), as outlined in Volume 1, page B-13 of the* Manual of Navy Officer Manpower and Personnel Classification *(NavPers 15839C), as approved by SecNav in 1975.*—ED.

Reunions

- USS *Vincennes* (CL 64)—Planned reunion, contact Peter H. Capp, 29 Myrtle Ave., No. Plainfield, N. J. 07060.

- USS *Diphda* (AKA 59) — Reunion in April 1978 at New Orleans, La. Contact Tom Coogan, 12185 Ford Line, Southgate, Mich. 48195.

- *USN & MCR Training Center Stationkeepers, Huntington, N. Y.*— Reunion planned for October 1978. Contact Ross E. Driscoll, 8 W. Maple Rd., Greenlawn, N. Y. 11740.

- USS *Philadelphia* (CL 41) — Reunion October 10-15 in Clearwater, Fla. Contact Frank Amorson, 93 Dunbar St., Somerset, N. J. 08873.

- *Naval Enlisted Reserve Association* —National conference October 26-30 in Pittsburgh, Pa. Contact Joe Wasson at 6703 Farragut Ave., Falls Church, Va. 22042; Phone: (703) 534-1329 or D. Brock at (915) 332-7682.

- VPB 216-PBM Mariners – Reunion October 17, San Diego, Calif., in conjunction with Assoc. of Naval Aviators October 28-30 reunion. Contact Bob Smith, 6468 W 85 pl., Los Angeles, Calif. 90045.

The Log Book

Here are some more excerpts from ALL HANDS articles of days gone by.

35 YEARS AGO

- The USS *Wasp,* aircraft carrier, was sunk in the South Pacific on September 15th as the result of an enemy submarine attack. *Wasp* remained afloat for five hours after being attacked and sank at a time when there were no enemy forces in the vicinity. The announcement of her sinking was delayed since there remained a possibility that the enemy was unaware of her sinking.

Wasp was torpedoed at approximately 2:50 o'clock in the afternoon; three torpedoes struck her magazines and gasoline tanks resulting in many explosions and serious fires. About 8 p.m., when all hopes of extinguishing the flames and saving *Wasp* had been abandoned, a U.S. destroyer sank her with torpedoes. About 90 per cent of her crew were rescued.

25 YEARS AGO

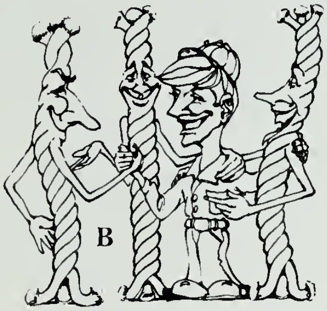
- Now being built at a New England shipyard is the first submarine in modern naval history to be designed primarily for training purposes. The completed vessel, designated SST-1, will be a 250-ton training and target submarine. SST-1 will be used both for crew training purposes and as a target submarine. Currently much larger submarines—including 1,500-ton fleet types—serve as target subs for both surface vessels and aircraft.

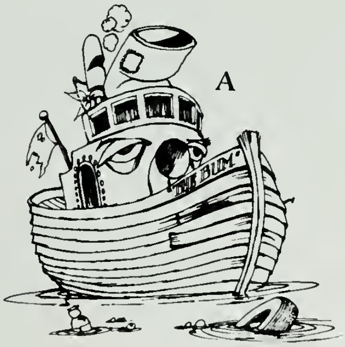
15 YEARS AGO

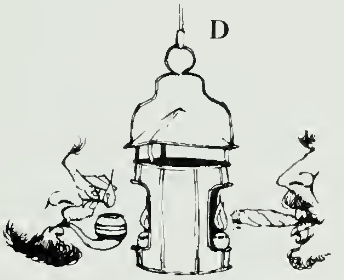
- Navy fliers who like Scuba diving have had a ceiling placed over them by the Naval School of Aviation Medicine. The school evaluated the effect of flying at high altitudes after diving to various depths. The study resulted in naval airmen being forbidden to fly higher than 18,000 feet within 12 hours after diving to depths of 30 feet or more, the report said.
- Thirteen ships of the U.S. First Fleet are participating in the 1962 Seattle World's Fair and Century 21 Exposition which opened at Seattle, Wash., April 21. More than 3500 men are embarked in the 13 ships. General visiting by the public was conducted aboard all the ships during their stay in Seattle.

Stern Shots

Through the years, Navy people have developed a lingo of their own to describe daily occurrences. These illustrations suggest some of the more popular terms and phrases. How many can you identify?







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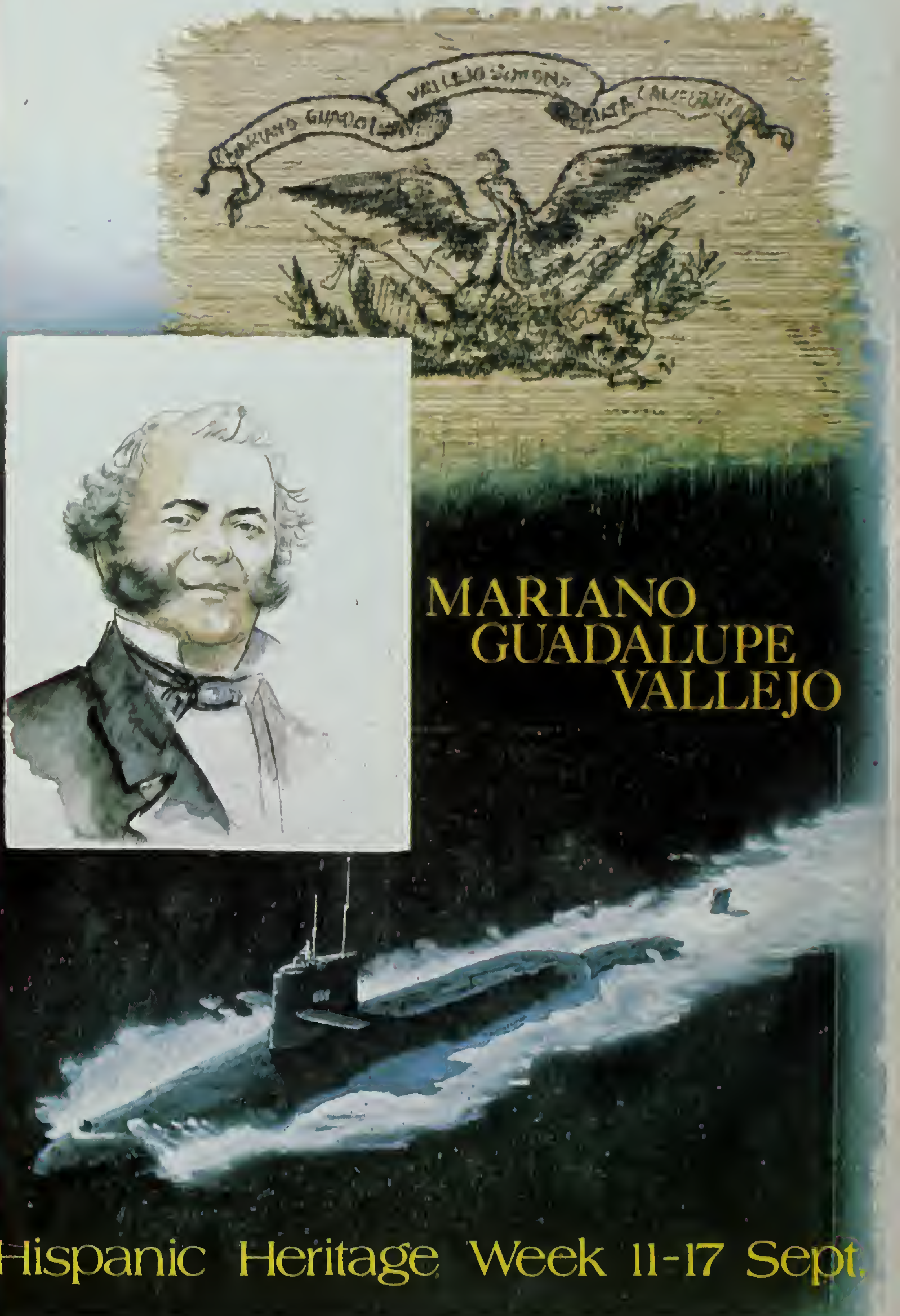
Answers: A, Bumboat; B, He knows the ropes; C, Jacob's Ladder; D, Smoking Lamp; E, Dead Horse; F, Scuttlebutt; G, Dog Watch; H, Mind Your Ps and Qs.

Hispanic Heritage

The United States Navy Salutes



MARIANO
GUADALUPE
VALLEJO

Hispanic Heritage Week 11-17 Sept.

ALL HANDS

OCTOBER 1977

UNIVERSITY OF FLORIDA LIBRARIES

SPRUANCE *CLASS DESTROYERS— USS* Paul F. Foster *(DD 964), USS* Elliot *(DD 967) and USS* Hewitt *(DD 966)— berthed at the Naval Station, San Diego. (Photo by PHCS Herman Schroeder, USN(Ret))*

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ALL HANDS

MAGAZINE OF THE U.S. NAVY — 55th YEAR OF PUBLICATION
OCTOBER 1977 NUMBER 729

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Their grueling determination paid off handsomely

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Explaining the two co-existing fleet command structures

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Dir. Print Media Div. (NIRA): Lieutenant Commander G. Wm. Eibert
Editor: John F. Coleman
Production Editor: Lieutenant John Alexander
Layout Editor: E. L. Fast
Art Editor: Michael Tuffli

Staff
LT Bill Ray
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JO2 Davida Matthews
JO3 Francis Bir
Edward Jenkins
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Covers

Front: Excellent timing by PH2 R. A. Rima catches the anchor of the carrier USS *John F. Kennedy* (CV 67) on impact — giving an idea how much water is displaced when 30 tons of steel is followed by a 180-fathom chain, each link weighing in at 160 pounds.

Back: In a salute to the Navy's Birthday — October 13 — artist Audie Bransford highlights the career of Commodore Stephen Decatur of Tripolitan War fame.

Currents

NESEP Program Terminated ● The Navy Enlisted Scientific Education Program (NESEP) has been terminated because of a lack of available funds to support the program. However, other options remain for enlisted personnel to pursue an officer's commission. Although the Navy was forced to stop payment of tuition for NESEP students in 1976, each NESEP graduate still costs the Navy a total of at least $28,000 in pay and other support costs. In addition, new regulations governing funding previously available to students under provisions of the "GI Bill" reduced the number of personnel able to apply for the NESEP program. No new NESEP applications will be accepted. Those persons who have started the FY 78 application process were informed by Oct. 1, 1977 of their Scholastic Aptitude Test (SAT) results so they may apply for other programs for which they may be qualified. All remaining FY 77 selectees will be allowed to enroll in school. The final NESEP graduate is expected to be commissioned by the end of FY 82. Enlisted personnel interested in receiving a college degree and an officer's commission still have several available options. Officer commission sources open to enlisted personnel include the NROTC program offering four-year scholarships at one of 56 participating civilian universities, and the U.S. Naval Academy. Interested personnel who lack adequate academic preparation to successfully compete for Naval Academy and NROTC appointments are encouraged to apply for special preparatory programs. The BOOST (Broadened Opportunities for Officer Selection and Training) Program is designed to prepare selected enlisted personnel for entrance to the Naval Academy or NROTC. The Naval Academy Prep School (NAPS) located at Newport, R.I., provides students with an academic and military environment uniquely designed to strengthen a student's ability to complete the Naval Academy curriculum. Additionally, for those who receive a baccalaureate degree in off-duty education programs, Naval Reserve officer commissions are available through Officer Candidate School (OCS) and Aviation Officer Candidate School (AOCS). Personnel interested in any of the programs should consult with their command education officer or career counselor.

New Personnel Management System Tested in Washington, D.C. Area ● A new system providing "one-stop" personnel and disbursing service now is being tested in the Washington, D.C. area. The new Pay and Personnel Administrative Support System, called "PASS," will simplify such routine procedures as check-in/check-out and changes in dependency status. Additionally, greater personnel pay record accuracy is expected as the new centralized and automated system goes into effect. PASS will be introduced in two phases: Phase one of the plan calls for the consolidation and the co-location of personnel and pay functions. Pilot PASS offices will be established during this phase in Norfolk, Va. (Nov. 1, 1977) and San Diego, Calif. (Feb. 1, 1978), in addition to the Washington office. PASS offices will be managed by a single personnel service center established by the appropriate major command in a geographic area. Smaller satellite offices, similar to the existing pay network, will remain in subordinate command locations to provide one-stop support. In phase two, an improved data reporting system will be fully automated to link PASS offices with both BuPers and the Navy Finance Center through use of remote computer terminals. Following full implementation of both phases, it is anticipated that PASS capabilities will be expanded to provide support to local commands by automation of such data as watch-quarter-station bills, muster lists, statistical reports and individual qualification and training reports. The target date for completion of phases one and two is 1981.

Status Reviews of MIAs Resumed

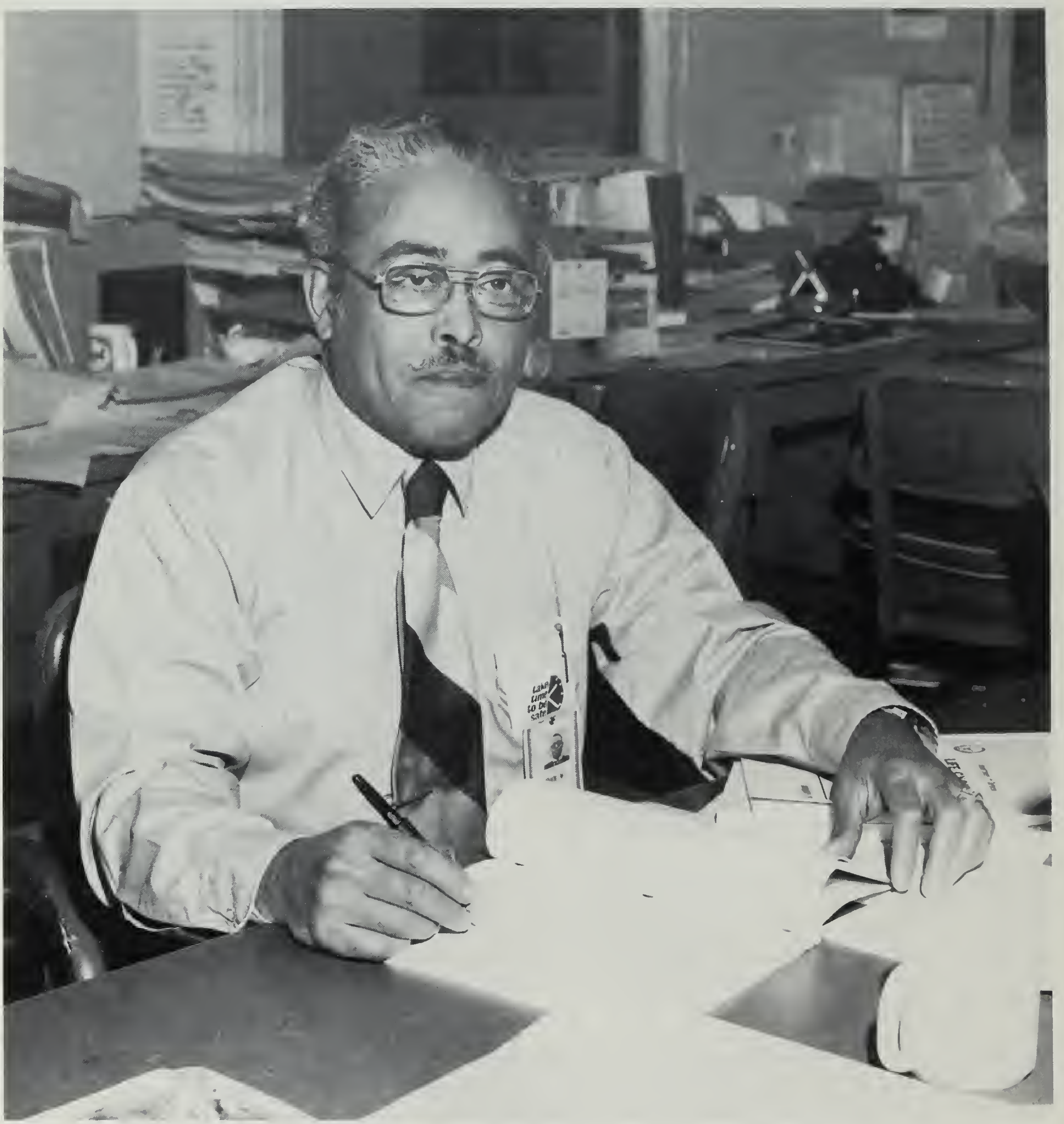
● The Department of Defense has announced that the service secretaries will resume status reviews of personnel listed as missing in action (MIA) during the Vietnam conflict. Status reviews are individual, case-by-case investigations, prescribed by law, to determine if a serviceman should be continued in a captured or missing status, or reclassified as deceased. MIA status reviews, except those requested by next-of-kin, were halted in mid-1973 pending legal suits questioning the constitutionality of the law requiring these reviews. The courts upheld the constitutionality of the law. The status review moratorium was continued until investigations by a select congressional committee and a Presidential commission determined that there was no credible evidence to indicate that any American service personnel are being held in Southeast Asia against their will. MIA next of kin will be notified in advance that a review of their relative's case will be conducted. Next of kin have the right to attend the review hearing and present any information they consider relevant. This action in no way alters the U.S. Government's intent to obtain as full an accounting as possible of missing or deceased personnel. Negotiations with Southeast Asian governments will continue, to gain as much information as possible on all unaccounted servicemen.

FPO Addresses Eliminated In Hawaii and Alaska

● After several years of review, the Department of Defense has decided to eliminate APO and FPO addresses in Hawaii and certain parts of Alaska effective Sept. 3, 1977. The adequacy of normal U.S. Postal service and the availability of postal facilities were primary considerations in the decision. The following civil zip codes will replace the existing FPO zip codes:

		Civil Zip Code	
Zip Code	*Location*	*Assigned Unit Mail Room*	*Qtrs/Residence Mail*
96610	Pearl Harbor, HI	96860	Honolulu, HI 96818
96610	Camp Smith, HI	96861	Aiea, HI. 96701
96611	Barbers Point, HI	96862	Ewa Beach, HI 96706
96612	Lualualei, HI	96792	Waianae, HI 96792
96613	Wahiawa, HI	96786	Wahiawa, HI 96786
96615	Kaneohe Bay, HI	96863	Kailua, HI 96734
98771	Juneau, AK	99801	Juneau, AK 99801
98774	Anchorage, AK	99501	Anchorage, AK 99501
98776	Ketchikan, AK	99901	Ketchikan, AK 99901

Provisions have been made to ensure all mail in the pipeline at the time of conversion and subsequently received in FPO San Francisco or Seattle will continue to be processed through to Hawaii or Alaska without delay for a reasonable period of time. For directory purposes, 60 days is considered a reasonable period for changing addresses. It is anticipated that the pipeline of old FPO addressed mail will be virtually eliminated by early November 1977.



Take time to be safe

'my letters ruffled feathers'

BY JO2 DAN WHEELER

No one likes to feel out of place; everyone wants to belong. That's why it's tough being the only "short hair" at a rock concert, or the only novice in a tennis tournament, or the only black officer in an all-white officer corps.

"There weren't many blacks in the Navy when I came in. I knew it and I knew why, so I made it my goal after being commissioned to prove that blacks should routinely be recruited as officers, if qualified. Race is not now, nor was it then, a measure of ability," said retired Lieutenant Commander John W. Lee, the first black to be commissioned in the regular Navy.

"Many years ago, I repeatedly wrote to the Chief of Naval Personnel trying to get the Navy to actively recruit blacks for ROTC units," Lee said. "I guess my letters ruffled feathers sometimes, but I thought it was my place to say what I knew to be right."

Lee, now a logistics engineer at the Naval Avionics Facility, Indianapolis, Ind., is a good-humored, easy going Hoosier who entered the sea service in 1944 and graduated from boot camp as a steward's mate. Shortly thereafter, he was accepted into the V-12 Officer Candidate Program at DePauw University, Greencastle, Ind., and commissioned an ensign in the Naval Reserve upon graduation in 1945.

Retired LCDR John Lee.

"Back then, the Navy didn't use all the human assets available. Of course, that's changed now, but then there weren't many ratings open to enlisted blacks and there were no black officers in the regular Navy," Lee said. Almost as an afterthought, he added, "I wanted to be a signalman or quartermaster —but those ratings were not open to blacks—so, they made me an officer!"

When World War II ended, a more enlightened Navy began an augmentation program to encourage reserve officers to accept regular Navy commissions. Seventy-two reserve officers, including three women, were in the Navy, but only three applied—a warrant officer and two lieutenants. "I wasn't one of them," said Lee, who, at the time, was helping place his ship in commission. "In fact, to this day, I'm not sure what became of those applicants."

Later, Lee received a telephone call from the Chief of Naval Personnel telling him that he had been selected to receive a regular commission, and asking him if he would accept. "We talked about it and he said, 'You've got all the qualifications.' "

He discussed the idea with his parents and they were against his accepting the offer; his father wanted him to go into the family's business. Lee decided to accept, anyway, and was commissioned into the regular Navy on March 15, 1947.

Later that year he married. Today his wife, Jerry, is an assistant librarian in Indianapolis and all three of their children are college graduates.

Lee's first duty station after augmentation was the Bureau of Naval Personnel where he remained until ordered to General Line Officer's School. From there he was sent to Weapons Officer's School and then to the carrier

'my letters ruffled feathers...'

Above: ENS John Lee, assistant navigator aboard USS Kearsarge *(CV-33) in 1948. Right: Promoted to Lieutenant Commander, Oct. 15, 1957.*

USS *Kearsarge* (CVA 33).

"Although I was the only black regular Navy officer at the time, I wasn't the only black officer in the Navy. There were several in the reserves," Lee said. "At every duty station I was treated well and never noticed any acts of overt racial discrimination directed toward me."

In hindsight though, Lee mentioned that he did notice something peculiar about the way he was received at each new duty station, especially in the early years of his career. It seems that no one was ever surprised to see a black officer reporting for duty in a predominantly white Navy. "At least the quarterdeck watch officer or petty officer should have been somewhat surprised at having me report for permanent duty, especially since only names, ranks and reporting dates were routinely forwarded. They never were, though," Lee said.

"It wasn't until years later that I learned why," Lee said. "Years after my first assignment, I was stationed in Dover, N.J. My wife and I attended a party where we learned from the XO's wife that before orders were ever cut for me to come to that command, a dossier had been sent to see if I would be acceptable. I guess it was done each time. Apparently, there was a great deal of greasing the skids before I ever showed up."

Lee still has an active interest in Navy developments and believes considerable improvements have been made since he began his career 30 years ago. He pointed out that today, for instance, there are many "people programs" and even a Human Goals office to provide guidance in minority affairs.

"Today's senior officers are quite concerned about people and that's good. There are many officer education programs and the Navy tries to match billets with abilities," Lee said. "Also, I think the Navy has been leading the way in race relations education. They do more than simply comply with the law—they do it in the spirit it was intended."

There were many areas needing improvement when Lee was on active duty. Many of those things which bothered him—slow promotions, low pay, long separations from family—have been corrected now.

Yet, through it all, Lee thinks that perhaps he and his family benefited from the hardships. "There wasn't much money in those days, so we had to live frugally," Lee said. "Additionally, during my service, we had to move 29 times and often I was sent on long deployments or unaccompanied tours. It was tough not being able to make close friends or establish roots, but I think we are better for the experiences we had in the Navy.

"My oldest daughter once had to list the schools she had attended as part of the admittance requirements for yet another school. We needed an extra sheet of paper to complete it—she had attended 11 elementary and three high schools!"

Lee doesn't believe that the transfers hurt his daughter's education in any way since she's now a medical physical therapist and certainly cosmopolitan in her outlook. "She can hold her own talking to anyone and has no problems getting along, due at least in part to her Navy upbringing," Lee said. "At times, it seemed very, very hard; in spite of the hardships, we miss Navy life."

The things Lee misses most are variety and travel. "Although I cursed the transfers in one breath, I still enjoyed the new challenges." He served in 10 ships and at numerous field activities, but his most challenging assignment was as commanding officer of an oceanographic detachment engaged in classified operations and research, in the late 1950s.

"The thing I liked most about that duty was the high caliber of people," Lee said. "They were the best, the very best. I found it especially rewarding to take people's intangible ideas and convert them into realities—that was part of our job."

That seems to be Lee's specialty, turning dreams into reality. All of the dreams he had about changing the Navy have come to pass. Now, as he approaches age 54, his children are well educated and his job is secure. Although he has no plans to retire again soon, Lee admits that he's about ready since, by his own admission, his favorite hobby is "rest and relaxation."

From the regular Navy's first black ensign to a successful engineering career 30 years later, John Lee has had two full careers. "It's been a great life," he said. "I have no regrets about the time I spent in the Navy, I enjoyed it all. I wouldn't hesitate to recommend a Navy career to any young man or woman as their life's vocation."

In January 1961, LCDR Lee conducted pre-commissioning detail school for sailors aboard USS Constellation *(CV-63).*

Getting together afte

The United States was at war in the winter of 1944 and its attention was focused on news from the front. Miles from the front lines, however, 13 men were fighting their own war at Great Lakes Naval Station in Illinois. Theirs was a continuing war, a struggle against racial discrimination.

The "Golden Thirteen," as they were later called, comprised the Navy's first all-black Officer Candidate School company. They ate alone, lived alone, and studied alone. In fact, they were the only students in the school.

"It was pure hell," said Frank E. Sublett, one of the nine surviving members present at a recent reunion sponsored by the Navy Recruiting Command's Campus Liaison Officers Conference. "It was something both we and the Navy had to endure; we came out of it reasonably successful."

"We knew we were putting ourselves—and all Blacks—on the line when we agreed to go to OCS," said Jesse Arbor, another one of the reunionists. "It was a literal test of our abilities. If we didn't score high, we would be held accountable. People would point to us as proof that blacks couldn't be leaders in the Navy."

Dr. Samuel E. Barnes was also there when the "experiment" began. "We were determined to excel as a class," he said, "and we weren't concerned about ourselves as individuals, but as a group. At night, we'd sit in the head —windows and doors blacked out— and study naval science courses, semaphore and morse code. We'd drill each other all night if necessary, and this drew us together. We wanted to prove that our selection was justified and that we weren't a party to tokenism."

None of the nine knows for sure why he was selected to be one of the first group of black line officers to be commissioned as a unit into the Naval Reserve—"There were no application forms, just an opportunity." Some suspected they were being used in a massive publicity campaign to prove that discrimination in the Navy was a thing of the past. The Navy had opened all general ratings to blacks in 1942, but had commissioned only one or two blacks and no black line officers.

"Personally, I didn't care why I was chosen," said George C. Cooper. "We simply wanted to do an outstanding job, to be an example for those who would come after us. We wanted them to be able to look at us with pride and know that the Navy helped make it possible."

Their grueling determination to succeed paid off handsomely. They, the first black OCS class, graduated with a 3.89 overall grade point average—a record to this day.

Pinning on ensign's bars didn't wipe out discrimination though. The Navy was changing in 1944, but change involves people, and people change their attitudes slowly. "I can recall white sailors steering clear of me just to avoid saluting," said Dalton L. Baugh, Sr. "They'd skip across the street when they saw me coming. After a while, though, I'd cross too and catch them on the other side. It takes time to overcome prejudices."

Dr. Barnes remembered other instances of overt racism. "My biggest problem was being accepted by fellow officers," he said. "I remember walking into an officers' club on Okinawa and you could cut the silence with a knife. Then, all of the officers in the place walked out—it was just me and the bartender."

Graham E. Martin, who said he joined the Navy because he had no great desire to visit Army bootcamps in the South, said, "I think the Navy tried to shelter us against overt discrimination by trying to eliminate compromising situations. I was placed in command of a YO out of San Francisco and the Navy slowly changed the oiler's white complement to an all-black crew. What pleased me immensely, however, was that a white engineer didn't want to leave—eventually, he had to, though."

Though each of the former officers experienced various degrees of discrimination, all agreed that overt racial prejudice in the Navy is not prevalent today. "It was killed by intelligence," said John Reagan. "We demonstrated our skills and kept our calm instead of

nore than three decades

throwing bricks and raising our voices."

Arbor added, "It's never enough to demand equal rights and we knew that. You have to prove your worth as a professional—I said 'professional,' not 'person.' We are all people, but equal job opportunity is based on a person's professional skills."

Most of the original unit left the Navy after the war was over. A few returned during the Korean War and some remained active in the reserves.

Left to right: Graham Martin, George Cooper, Jersey Grut, Dalton Baugh, Jesse Arbor, Jack Morris, Wesley Brown, Samuel Barnes, Frank Sublett, John Reagan, William White and Dennis Nelson.

Lieutenant Commander Dennis D. Nelson, USN(Ret) augmented to the regular Navy and stayed for 20 years. He said he pursued a Navy career because he felt opportunities in the service were superior to those on the outside. Today, two of his sons are also servicemen—one is a Naval Reserve lieutenant commander and the other an Air Force pilot.

Wesley A. Brown, though not in the first black company, also attended the conference. Brown was the first black to graduate from the Naval Academy (June 1949). During his 20 years' service (which ended in 1969), he saw many improvements for minorities.

"In the beginning," he said, "when blacks were allowed into the general ratings, many COs would simply send them back to the nearest receiving station rather than accept them at their command. Integration would have been much slower if the Navy had not made it policy to require COs to put into writing their reasons for rejecting a particular individual.

"There were only 13 of us in 1944," Brown said, "and now the Navy has more than 1,000 black officers. To me, that indicates that a lot has been done."

Today, not only are all ratings open to blacks and all minority groups, but also every officer corps as well. Color of skin no longer determines how high one can advance or what opportunities will be available—the only qualifying factors are ability, education and experience.

"I'm impressed," Dr. Barnes said with a note of satisfaction. "I never thought I'd see a black admiral in the U.S. Navy and now there are three (Vice Admiral Samuel L. Gravely, Jr., and Rear Admirals Gerald E. Thomas and Lawrence C. Chambers). I'm also impressed with the Navy's intentions, which I believe are sincere."

The consensus of the reunionists was stated by Cooper: "Opportunities are available now in the Navy, opportunities we only dreamed about 33 years ago. The youth of our country have begun to see an individual for his worth, for his contribution—not his color. If you are willing to produce, you can be anything that you want in this Navy."

The surviving members of the Navy's first all-black OCS class and their occupations today are:

Dr. Samuel E. Barnes—Chairman, Health and Physical Education Division, University of District of Columbia, Washington, D.C.

Dalton L. Baugh—LCDR, USNR (Ret), Owner and President, D. Baugh & Associates, Inc., Mattapan, Mass.

Jesse W. Arbor—Engineer, Board of Education, City of Chicago.

George C. Cooper—Director, Department of Human Resources, City of Dayton, Ohio.

William S. White—Presiding Judge, Juvenile Division, Circuit Court, Cook County, Ill.

Dennis D. Nelson—LCDR, USN (Ret), Minority Small Business Specialist, Small Business Administration, San Diego.

John W. Reagan—President and Director of Counseling, Community Housing Services, Pasadena, Calif.

Frank E. Sublett—Service Manager, Grant Dean Buick, Highland Park, Ill.

Graham E. Martin—High School Teacher, Indianapolis, Ind.

Wesley A. Brown is a Facilities Planner in the Office of the President, Howard University, Washington, D.C.

By JO3 John Brindley
JO2 Glenn R. Amato
LTJG Ralf H. R. Edler

Awareness in Action...

LCDR John Brown

"Many minority group members are unaware of the job opportunities in the Navy," said Lieutenant Commander John Brown, the Campus Liaison Officer (CLO) at Dillard University in New Orleans. "Some still think they'll be relegated to menial tasks in a boring environment, instead of being offered a challenge."

LCDR Brown, one of 41 CLOs working on college campuses around the nation, also said that many minority group students think they'll be token officers with no responsibilities except showing other ethnic group members that there is no discrimination in the Navy. "The idea is absurd, of course," Brown said. "People's races have absolutely nothing to do with their job assignments in the Navy."

In a nutshell, it's those erroneous concepts voiced by minority students that the Navy is combating through the Navy Recruiting Command's Campus Liaison Officers Program. Designed to enhance the Affirmative Action Plan, and called "a brilliant idea" by the CNO, the program has four main objectives:

- Provide college communities with information concerning Navy life in general, Navy officer programs and the U.S. Naval Academy.
- Advise and assist recruiters in community affairs, minority recruiting and their relationship with the academic community.
- Increase the accession and retention rates of minority officers in the Navy.
- Help make minority communities aware of the opportunities and the potential for upward mobility in today's Navy.

CLOs are civilian educators—most of whom have had military service—who have received direct commissions as lieutenant commanders in the Naval Reserve. They assist in minority recruiting at their respective four-year, accredited colleges and universities by being available to students desiring information about a Navy career.

Recently they met in San Francisco, Calif., for their Fifth Annual Conference, to discuss ways to improve communications in minority recruiting endeavors and to attend briefings and workshops held by reserve members and active duty officers. Additionally, the Navy Recruiting Command sponsored a reunion for the nine surviving members of the Navy's first all-black OCS class, commissioned in 1944.

Just across the bridge from the Treasure Island CLO conference site, members of the National Naval Officers Association (NNOA) held their annual conference in Berkeley. The CLOs and reunionists were invited to hear guest speakers addressing the NNOA.

During the four-day conference, CLOs received valuable insight to aid them in their recruiting efforts from many high-ranking officers, among whom were: Chief of Naval Operations Admiral James L. Holloway III; Chief of Naval Personnel Vice Admiral James D. Watkins; Commander Third Fleet Vice Admiral Samuel L. Gravely, Jr.; Commander, Navy Recruiting Command Rear Admiral Edward S. Briggs; and the Chief of Information Rear Admiral David M. Cooney.

Perhaps, though, the most valuable information for daily use came from roundtable discussions among themselves as they talked about the challenge of recruiting.

"I don't 'hardsell' the Navy," said LCDR Linwood Jacobs, associate dean of students at the University of Virginia. "I think the awareness approach is best, so I encourage students to investigate all of their career options including the Navy."

LCDR Moses Walker

LCDR Charles Willie, a professor of political science at Grambling State University in Louisiana, believes that the only way to make contact with minority students on a favorable basis is to actively sell the Navy in both classrooms and social situations. "Since I teach political science," he said, "it isn't difficult to include a discussion of our country's military posture. At social gatherings, the conversation invariably turns to the Navy since many of my students know that I'm a reserve officer. No matter where the subject is broached, I'm ready to provide information and answer questions."

LCDR Herman Norman

Assistant professor of Afro-American and African studies at the University of North Carolina, LCDR Herman Norman sees his job as "helping to improve the Navy's image among minorities and explain Navy job opportunities. The fact that the Navy is making challenging careers available to minorities makes the idea of military service more attractive," he said.

Although talking about Navy life and expounding on the benefits is enjoyable, a CLO's job is not always that easy. Often, they are faced with students who have lifelong prejudices and misconceptions about the military and the Navy. These must be dispelled before communication is possible.

LCDR Alyce Jenkins

LCDR Alyce M. E. Jenkins, an assistant professor at the College of Education at Wright State University in Ohio, said she sometimes has problems convincing students of the merits of Navy officer programs. "The minority community seems more enthusiastic about the Air Force than the Navy," she said. "They are especially hard to convince in terms of pursuing long-range goals. We are competing with civilian industry for these young people and some of them are looking to satisfy immediate needs—more money now."

Jenkins' remarks closely paralleled those made by VAdm. Gravely when he stated at the conference that many blacks still consider the Navy to be "the least desirable service." Some CLOs believe the Navy needs to boost its use of minorities in recruiting campaigns and Navy literature.

RAdm. Cooney told the CLOs that the Navy is taking positive steps to remedy that situation by persuading the media to portray the Navy with an accurate racial balance in their coverage. This should make minorities more aware of the equal opportunity available in the Navy. Additionally, the Chief of Information said that the Navy expects to use more video tape and "video disc" in the future.

LCDR Moses Walker, an assistant professor of business administration and economics at Fayetteville State University in North Carolina, seemed to have the right approach to ensuring effective communication with minority students and still recognizing that more progress can be made. "The Navy isn't a utopia—no organization is perfect," he said. "What is important is that the sea service is taking steps to wipe out discrimination and embrace all races and nationalities in its ranks.

LCDR Charles Willie

"I tell students that choosing a career isn't something to be taken lightly," Walker said, "and a minority group member should be especially careful since opportunities in civilian life are still limited in some areas. Not so in the Navy—if you are willing to learn, the Navy wants you." ⚓

Command Organization and Operating Forces of the U.S

The below—issued as a message by the Chief of Naval Operations on Aug. 29, 1977—reviews the command organization of the U.S. Navy. It reemphasizes the separation of the administrative and operational lines of authority and redefines requirements for establishing separate staff structures and procedures for manning and personnel assignment. Here is the complete text.

There are two co-existing fleet command structures:

- The permanent administrative structure consisting of forces of a warfare type, such as surface, air, or submarine; and
- The operational or task structure comprised of forces from one or more warfare types organized to accomplish an assigned task or function of an operational nature.

To carry out the Department of the Navy's responsibilities for providing ready forces—trained and equipped—to the commanders of the unified commands, the operating forces of the U.S. Navy are administratively organized to maximize fleet readiness.

By definition, fleet readiness consists of:

Personnel readiness—including the quantitative responsibility of meeting total manning requirements and the operational goal of providing the necessary skills for operations and maintenance.

Material readiness—encompassing the required maintenance and logistic support for effective, sustained operations.

Training readiness—which requires sufficient operating time in terms of steaming days and flying hours, and sufficient participation in exercises, to ensure a capable and proficient naval force.

Administrative Chain of Command

The administrative chain of command of Navy operating forces begins with the President and the Secretary of Defense and continues through the Secretary of the Navy to individual unit commanding officers of the ships, submarines and aircraft squadrons. The chain consists of:

- President of the United States
- Secretary of Defense
- Secretary of the Navy
- Chief of Naval Operations
- Fleet Commander in Chief
  —CinCLantFlt
  —CinCPacFlt
  —CinCUSNavEur (Does not have administrative control of forward deployed LantFlt units, but reports to CNO on administrative matters.)
- Type Commander
- Group Commander
- Ship Squadron/Air Wing Commander
- Individual unit commanding officer

Fleet staffs in the administrative chain of command are organized for the purpose of developing and maintaining fleet readiness. This is discussed above, in the section on fleet readiness.

Ashore staffs—The fleet commanders in chief, type commanders and some lower echelon commanders and their staffs are based ashore and structured to discharge their readiness responsibilities. Their composition is determined by the tasks and functions assigned. The location of the headquarters and staffs must be at a base concentration of fleet activities to ensure the necessary accessibility for the close association required.

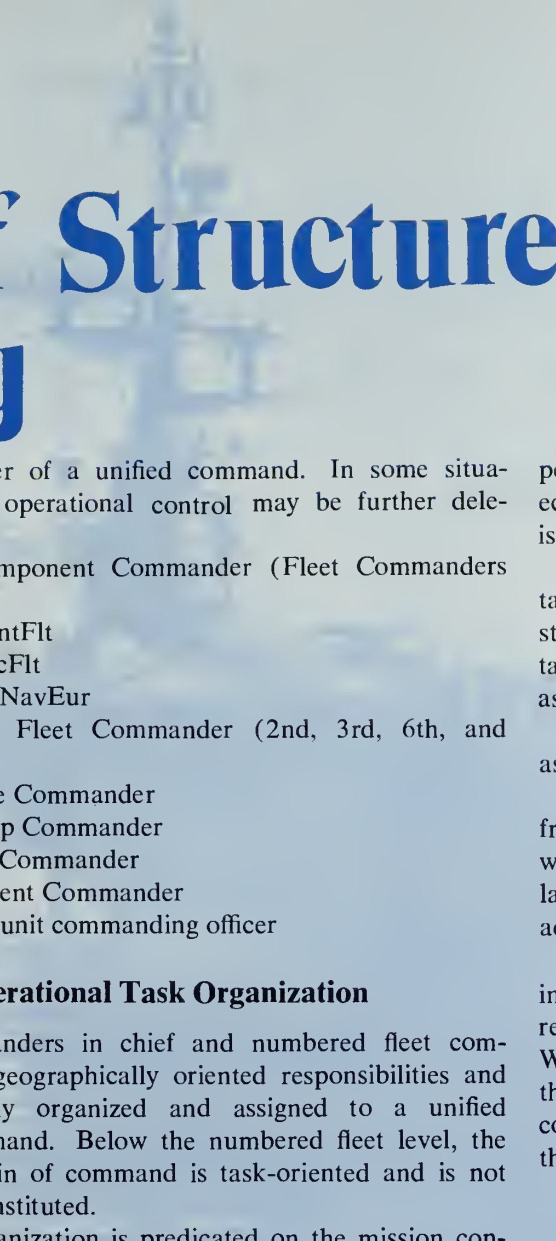
Afloat staffs—Group commanders and their staffs, except for submarines and small combatants, normally embark in ships of their command. Group commander staffs are organized and manned to monitor, develop and support the three categories of fleet readiness.

Operational Chain of Command

The Department of the Navy, through its administrative organization, organizes, trains and equips forces which are then employed operationally under the unified command structure. Command of operating forces of the fleet, at all echelons, is exercised through the operational organization.

The operational chain of command for Navy operating forces begins with the President and the Secretary of Defense as national command authorities, and continues down to individual commanding officers of ships, submarines, and aircraft squadrons. This chain consists of:

- President of the United States
- Secretary of Defense
- Joint Chiefs of Staff (The JCS are in the operational chain of command to provide strategic guidance and direction to the unified and specified commanders. However, the JCS do not exercise operational command or control of forces.)
- Commander Unified (or Specified Command) (Strategic force missile submarines, when on patrol, are under the direct operational command/control of the



Staff Structure for the Navy

commander of a unified command. In some situations this operational control may be further delegated.)

- Naval Component Commander (Fleet Commanders in Chief)
  —CinCLantFlt
  —CinCPacFlt
  —CinCUSNavEur
- Numbered Fleet Commander (2nd, 3rd, 6th, and 7th)
- Task Force Commander
- Task Group Commander
- Task Unit Commander
- Task Element Commander
- Individual unit commanding officer

Operational Task Organization

Fleet commanders in chief and numbered fleet commanders have geographically oriented responsibilities and are permanently organized and assigned to a unified (theater) command. Below the numbered fleet level, the operational chain of command is task-oriented and is not permanently constituted.

The task organization is predicated on the mission contained in a war plan or an operation plan of a commander of a unified command, and further delineated by the fleet commander in chief (naval component commander) and the numbered fleet commander.

- The task organization must be explicitly detailed in the operation order or operation plan.
- Changes in the task organization may occur with changes in forces assigned to the task group, geographic area of operation, military task, or tactical situation.
- Task forces are normally constituted for the purpose of prosecuting broad tasks, and are usually comprised of various components of different types organized by task groups, task units and task elements, each successive organizational level diminishing in scope, responsibility and size.

Management

The existence of two parallel fleet command structures has proved an effective means to manage both the readiness and operational aspects of the fleet. By manning the staff and command organizations of both chains with the same personnel on an additional duty basis, both manpower economy and the coordination of readiness with operations is greatly enhanced.

Because of the flexible nature of the task organization, task force, group, unit and element commanders, and their staffs, cannot be permanent assignments, but will be detailed on an additional duty basis to parallel a primary duty assignment.

- Task organization commanders and staffs are created as required by appropriate operations plans and orders.

—Personnel are assigned on an additional duty basis from existing administrative staff organizations, commands within the task organization, and where special skills or large numbers of personnel are required, by augmentees on additional duty from outside the task organization.

—Afloat commanders and their staffs are embarked in a unit of the task organization which will provide the requisite command, control and communications facilities. When adequate or suitable facilities are not available afloat, the operational staff may be located ashore, if the peculiar command, control and communications requirements for that level of command can thereby be better provided.

Summary

In summary, there are two chains of command:
Administrative and Operational.

The administrative organization is permanent, and provides for the readiness of naval forces. Personnel are detailed to these staffs on a permanent duty assignment. Administrative control of forces is exercised through the administrative chain of command.

Command of operating forces is exercised through the operational chain of command, which is essentially a task organization, established by the fleet commanders in chief as required to implement the operations plans and orders.

- These task organizations can be modified as necessary in wartime to meet operational requirements.
- Below the task force level, task groups, units and elements tend to become progressively more specialized in function.
- Task organization commanders and staffs are assigned on an additional duty basis using the existing administrative staffs as sources of manpower, with additional duty augmentation in numbers and skills from ships or other organizations.

Grains of Salt

BY LT TOM DAVIS

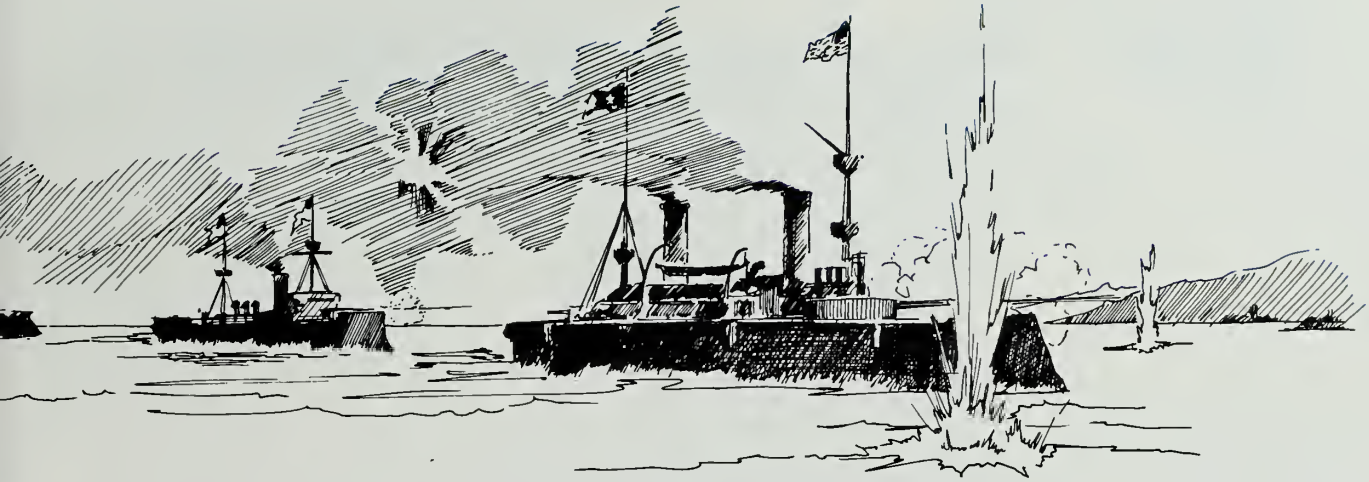
By early 1898, diplomatic relations between Spain and the United States had deteriorated to the point that American newspapers were featuring front-page stories decrying Spain's colonial policies in Cuba. Led by William Randolph Hearst and Joseph Pulitzer, the American press was printing articles of questionable accuracy portraying impoverished and starving Cubans cruelly dominated by their Spanish military rulers. Circulation ballooned as pro-Cuban and anti-Spanish stories became more and more inflammatory.

Demonstrations in the Cuban capital grew violent and, finally, USS *Maine,* one of the Navy's two second-class battleships, was sent to Cuba, ostensibly on a courtesy visit but actually to stand by in case the need arose to evacuate Americans. Maine's visit was uneventful until the night of Feb. 16, 1898, when an underwater explosion shattered the night calm, sinking the battleship with a loss of 260 officers and men. Stateside newspapers immediately laid blame for the loss of Maine on Spanish treachery. The American public called for war.

On the other side of the world, the Navy's Asiatic Squadron lay at anchor in Hong Kong harbor. On April 24, 1898, Commodore George Dewey, in command of the squadron, was informed by the Governor of Hong Kong that war had been declared between Spain and the United States. Two days later, Dewey received a telegram from Secretary of the Navy John D. Long: "War has commenced between the United States and Spain. Proceed at once to the Philippine Islands. Commence operations at once, particularly against the Spanish fleet. You must capture vessels or destroy. Use utmost endeavors."

On April 27, the Asiatic Squadron weighed anchor and stood for Manila. Two days later, ships were sent ahead to reconnoiter Subic Bay. When this search revealed no Spanish warships, the squadron continued on toward Manila. Dewey's plan was to steam under cover

'...Fire when ready, Gridley'



of darkness past the shore batteries at the entrance to Manila Bay. All went well until a stoker on board *McCulloch* threw a shovelful of coal dust into the furnace causing sparks to shoot up the the funnel.

Spanish shore batteries opened fire, but were soon silenced by the guns of *Boston.* Speed was reduced and at dawn the next day, May 1, 1898, the Spanish fleet was sighted at anchor off Cavite.

Changing course to starboard, Dewey formed his ships into line-of-battle with his flagship *Olympia* leading, followed by *Baltimore, Raleigh, Petrel, Concord, McCulloch* and *Boston.*

The first Spanish shell came from the shore battery on Sangley Point and soon all the Spanish ships joined in. The Spanish shelling went on for a full 20 minutes without an American shot fired in reply. Then, at 0619, at a distance of just under three miles, Commodore Dewey leaned over the railing of the flying bridge and called down his now immortal words to the commanding officer of *Olympia,* "You may fire when ready, Gridley." At a nod from Captain Gridley, the bugler blew "commence firing," the flag signal "engage the enemy" was broken, and the American ships opened fire.

They steamed past the Spanish fleet five times, firing continuously with only one break to check ammunition supplies and eat breakfast.

When the signal to cease fire was made, the Spanish fleet had ceased to exist as a fighting force. Every one of its ships was either burning, run aground, or sunk. There were more than 300 Spanish casualties, among them two commanding officers. Amazingly, not one American had been killed and only two officers and six men had been wounded. Spain's naval presence in the Pacific had been utterly destroyed.

Three months later another Spanish squadron was destroyed. This time it was a force of four armored cruisers and two torpedo boat destroyers, virtually the only effective naval force left to Spain after the battle in Manila Bay (with the exception of a small squadron protecting Spanish waters). Blockaded in the Cuban harbor of Santiago by the U. S. North Atlantic Fleet for more than a month, the Spanish squadron made a run for open sea on Sunday morning, July 3, 1898. In just under four hours, the running battle which ensued was over—one Spanish destroyer had been sunk and the other five ships had been run aground or captured. Spanish resistance was over.

The Spanish-American War not only marked the emergence of the U. S. as a world power, it showed that America's Navy was indeed a highly effective fighting force which could be relied upon by the American people to protect its interests—a reputation which it continues to uphold to this day. ⚓

Fishing for Submarines

"I think of it much like fishing; you throw out the hook and wait for something to take the bait," the Naval flight officer said.

Recently, ALL HANDS decided to tag along on one of these unusual "fishing" expeditions. The place: Naval Station, Keflavik, Iceland. The guides: officers and men of Patrol Squadron Twenty-Four (VP 24). And the "fishing" expedition: Anti-Submarine Warfare (ASW) operations conducted aboard VP 24's P3C "Orion" airplanes.

ASW operations from Iceland—as the Navy's around the world—are serious business. One look at Iceland demonstrates why. This nation about the size of Kentucky, straddles the lanes through which many Soviet-bloc ships and submarines must travel on their way to the Atlantic Ocean. Located between Greenland and Europe, just South of the Arctic Circle, Iceland is of strategic importance to member nations of the North Atlantic Treaty Organization (NATO).

Patrolling and protecting these sea lanes is a responsibility that does not fall solely to the United States. Maritime ASW aircraft from Canada, Great Britain, Norway and other NATO countries bordering the North Atlantic also assist in conducting around-the-clock patrols.

It can be seen that there is a whole lot more going into ASW operations than might be suggested by our Navy officer's fishing analogy. And the high degree of technical expertise, dedication and stamina required of ASW crews can best be understood by riding along on one mission.

* * *

Iceland's black lava mountains stood out against the overcast sky as the ASW crew arrived at the hangar to prepare for the upcoming mission. Although it was after 1900, the sun's occasional poke through the clouds pointed out it would be light all night. This far north at this time of the year (June) means about three hours of twilight with the sun just barely slipping beneath the horizon before it rises again.

The mission for which the crew prepared would end 15 hours later; not particularly long when you consider that ASW operations often count more than 15 hours as the norm.

The 12-man crew—5 officers and 7 enlisted—began going through their pre-flight preparations. On board the plane, sensor operators began making checks on the equipment they would operate once airborne. While on the ground the sensor operators checked out their various gear by "talking" to the plane's onboard computer that ties many of the systems together. By inserting programs into the computer they learned if the equipment was operational. If there was a problem, the computer told them not only where to go to solve the problem but how to fix it, as well.

As the sensor operators continued their checks, the pilot conducted a walkaround of his plane. He poked into wheel wells and grabbed flaps and cables. He studied connections and searched for leaks.

"One thing about this aircraft is its amazing dependability," he said.

...off Iceland

5

"It hauls a big load of men and equipment and, although some of this equipment wasn't originally designed to be buffeted around in an airplane, we've found that we can treat it gently and keep it operating in the P3C."

One more reason for the plane's dependability could be seen in the hangar. Squadron maintenance people, often required to work 12-hour shifts seven days a week, could be seen clambering in and out of the planes.

A couple of hours before the flight, the crew gathered and walked to the Tactical Support Center (TSC) located adjacent to the hangar. In a large room filled with maps, charts and computers, the crew would learn of its mission for the evening.

The crew surrendered their ID cards to the Marine Sentry at the entrance. In turn he issued special passes that must be displayed at all times inside this classified complex.

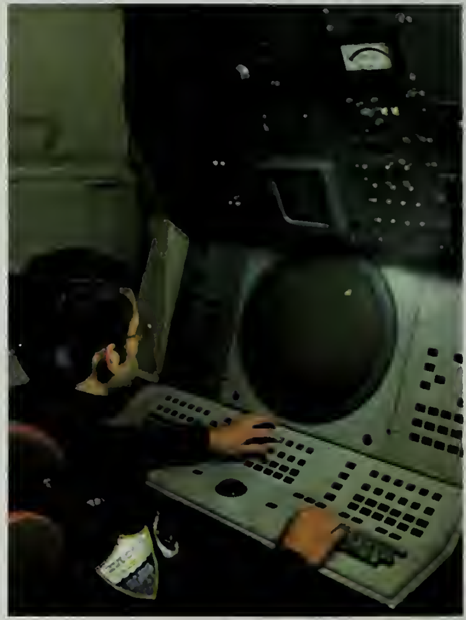
Once inside, one quickly learned why much of ASW operations are classified. As one put it, "It's really a case of spotting and identifying the other guy before he spots you."

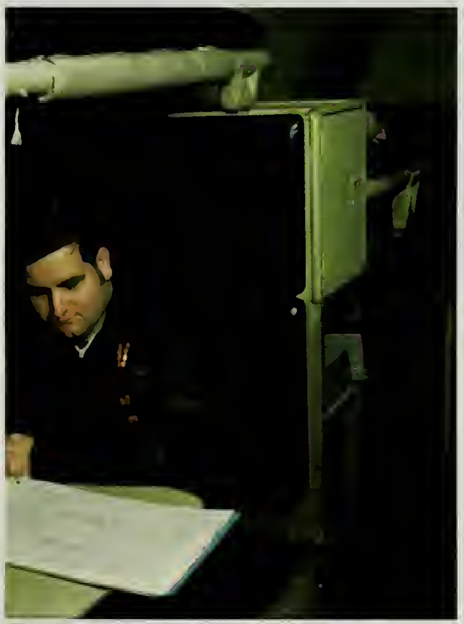
Because of this, the TSC serves as a focal point for some of the Navy's most technically sophisticated and intricate equipment. Although this crew had completed many missions in the past, the need for security consciousness was—as it must be—reiterated once again at the start of the brief.

Using information gathered from intelligence sources, previous missions and the like, the TSC staff told the crew where it would be flying this night and what they would be doing. All aspects of the mission were discussed, questions asked and answered and final preflight arrangements made.

Back at planeside, one final bit of very important preparation was also being made. The food was brought aboard and stowed in a small but surprisingly well-equipped galley in the rear of the plane.

"Everybody has an important job to do on the plane," an enlisted flight technician said as he put cartons of milk in the tiny refrigerator. "But





Facing page top to bottom: The TACCO's station is the airborne ASW nerve center. A VP 24 Orion *flies over Iceland's black lava fields and rugged terrain. This page, top to bottom: Mountains ring the world's northernmost metropolis and capital of Iceland—Reykjavik. A crewman checks a manual in the plane's galley.*

if you've got one guy on your crew who also happens to be a good cook, then it makes it a whole lot easier to handle the long missions."

The countdown continued. Half an hour before flight time and more than three hours after preparations had begun, the pilot called the crew together aboard the plane and issued his final instructions. Bailout and ditching stations were assigned to the novice P3C passenger along for this mission. He was shown where his parachute was stowed, how to put it on and how to operate it—amid assurances that this was, of course, just a precautionary measure. Precautionary or not, one noticed that in light of the fact that the mission would be conducted entirely over water, the crew treated these final instructions with appropriate seriousness.

"Set Condition Five," the pilot said over the intercom as the plane taxied toward the end of the runway. Condition Five is the military's equivalent to the "No Smoking—Fasten Seat Belt" signs one sees on commercial airlines. When the word was passed, the crew went to their assigned stations, donned survival gear and helmets and fastened their seat belts. And, of course, there was no smoking.

Once airborne, two crewmen immediately conducted an inspection of the aircraft to confirm the integrity of all systems like fuel, oil, hydraulics and electrical/avionics equipment. This was Condition Four.

Finally, when word was passed to set Condition Three, the crew left their seats and began preparation for the mission.

The business of locating, identifying and tracking submerged submarines from an airplane thousands of feet in the air can be as fascinating as a good detective novel or—returning to our fishing analogy—as exciting as hooking and catching that *really* big fish. Here's how it works.

Over the assigned area, acoustic listening buoys were dropped in a pattern over the ocean. Each buoy reeled out a microphone and sprouted

Top to bottom: Shut down to conserve fuel, the P-3 engine is silhouetted on station by the midnight sun. Instruments, maps and people fill the cockpit. Military and commercial aircraft share Iceland's major airport at NAS Keflavik.

an antenna upon impact. These buoys are the ears of the plane, radioing back any sounds made in their vicinity—including the distinctive sound made by a submarine. The buoys are powered by batteries activated by the ocean's salt water. And, after their usefulness has ended, water soluble seals dissolve and the buoy sinks.

As each buoy was dropped, a symbol appeared on the Tactical Coordinator's (TACCO) computer display screen showing where the buoy was located and the channel number over which it was broadcasting.

The TACCO, who is overall tactical mission commander, directed the operations as the pilot guided the plane over the area. Using the computer for all his mechanical computations, the TACCO chose a course for the plane that was also displayed on a computer screen in front of the pilot in the cockpit.

At a glance the pilot could see which direction to head for the next buoy drop. In addition, he could see how far he was from the next target, his ground speed and any other bits of information he could summon from the computer as desired.

Soon, all the buoys had been dropped and all had been confirmed as operating properly. Back at Sensor Stations One and Two, operators continually monitored the signals beaming back from the buoys while a machine printed out patterns made by those signals on rolls of paper.

One sensor operator noticed a suspicious looking signal coming from one of the buoys. Switching to that channel and pressing a number of buttons, he expanded the visual signal for closer scrutiny.

Each ship and submarine in the world emits a unique sound as it moves through the water. When the sound is printed out it creates a "signature" that enables the operator to positively identify what he has picked up.

It was this signature that the sensor operator now studied. Once again aided by the computer, the sensor operator was able to identify the signature as that of a surface ship. He relayed the information to the TACCO who entered the information, like all information pertinent to the mission, into the computer. The TACCO was now able to view on his screen where and what type of contact had been made.

The lull following the interest over the initial mission contact allowed one a chance to study the other stations being manned in flight. One of the big advantages of ASW operations conducted from the P3C is that the crew need not rely solely on the acoustic listening devices in their search for ships and submarines. Many other detection devices, all integrated into the plane's computer, allow the TACCO a number of means by which targets may be located, identified and tracked

At Sensor Station Three, an operator sat before an array of gear designed to assist in the ASW operation. Radar can be used to help spot targets in the search area. IFF is an automatic system by which targets may be identified as friend or foe. Also at his disposal is a system called Magnetic Anomaly Detector or MAD for short. MAD operates on the principle that any large hull moving through the water causes changes in the earth's magnetic field. This can enable the P3C crew to localize targets with pinpoint accuracy.

One other piece of gear is called ESM—Electronic Support Measures—which works by scanning the area for signals that may mean a potential target is operating some type of electronic equipment. Since the computer memory has the characteristics of these various electronic emissions stored, an ESM contact automatically appears on the operator's screen along with identifying information.

These ASW systems and others may be operated together, singly or as the TACCO directs and as the mission warrants. The computer through which they operate ties them together to ensure they all work in harmony in pursuing the mission's objective.

Forward of Sensor Station Three is the cubicle manned by the navigator/communicator. NAVCOM also has a number of systems available to help in the mission. Foremost of these are the automatic navigation systems. Inertial Guidance systems plus the computer's own navigation system provide the NAVCOM with checks and double checks on the plane's exact position at all times. And, like many of the other ASW systems aboard the Orion, there is a backup system for use if needed.

"I just pull out the old sextant here and take a star fix," the NAVCOM said.

Besides ensuring the accuracy of the aircraft's geographic position or fix, the NAVCOM also handles all aircraft communications and assists the TACCO however he can.

As the mission continued, sensor information from many of these systems poured into the TACCO. As the one man on the plane with "the big picture," the TACCO continually analyzed and evaluated the information, directing the plane to new courses as tactical decisions were made.

Up forward, the pilot (formally called the Patrol Plane Commander

or PPC) exercised his duties of ensuring the effectiveness of the aircraft and crew through close coordination with the TACCO, maintaining the safety of flight and—oh yes—flying the airplane.

Sitting between pilot and copilot was a man who continually scanned the jumble of dials, lights, switches and gauges that filled the cockpit. The flight engineer, usually a senior enlisted man, brings to his job an intimate technical knowledge of the airplane. He is thoroughly familiar with all its systems and equipment and with their operation during normal and emergency conditions.

He has spent so many hours scanning the indicators in the cockpit that, as one flight engineer said, "I don't actually read the dials while we're flying. All I have to do is note the direction of the gauge pointers to know if things are going well."

By this time, although it was after 0200, the sun still shone on the horizon. This made the job of one more "detection device" quite a bit easier.

"We call it the Mk-1 Eyeball," the crewman said with a grin. In spite of all the sophisticated ASW equipment aboard the plane, crews still appreciate the importance of a sharp pair of eyes. An off-duty crewman is assigned to visual lookout duties by the TACCO. As aft observer he scans the ocean, constantly on the lookout for anything of interest.

As the plane droned on, one observer spotted a fishing boat that warranted a closer look. Fishing boats in the waters around Iceland are very common. But common, too, are intelligence gathering ships that look almost identical to the type of fishing boat found in the area.

The boat, positively identified as a fishing trawler, was left behind as the plane regained altitude and continued on its course.

Since all the buoys had been dropped and were operating properly, the aviation ordnanceman, who is responsible for maintaining and loading the buoys into the pressurized chutes, went back to the galley and began preparing supper (or was it breakfast?). As he worked it became apparent this was one crew with a good cook.

"That fellow can do some amazing things with hamburger and a hot plate," one sensor operator said as he sat back at his station and sniffed the aroma coming from the galley.

One by one, the operators were relieved at their stations and went back to eat. Up in the cockpit, the third pilot each crew carries relieved one of the pilots who also headed for the food.

"We carry an extra pilot on each mission because flying a 10-hour mission straight through would be incredibly demanding," the pilot said between forkfuls of meat and vegetables. "This way we rotate about every hour and a half. It keeps the pilot and copilot fresh

Opposite: A pilot "gets his head into his work" during preflight inspection. Left: Sensor operators scan their equipment for "signatures." Below: U.S. and other NATO country ASW airplanes often work together out of Keflavik.

enough to safely handle this complicated aircraft." With that the pilot dumped his empty paper plate in the trash can and jumped into the bunk slung over the galley table.

Ten hours after the plane had taken off, their time on station ended. There had been no "hot contacts" on this mission. "But we could have handled anything that might have come up," the enlisted flight technician said. He should know. It's his job to see that all the ASW equipment onboard the plane is "up" and functions throughout the mission. This night's mission had been an easy one for him. He'd checked a couple of computer panels, replaced a fuse or two and spent much of his spare time as an observer.

As the plane came about for the long flight home, some crewmen wrapped themselves around the equipment at their stations and dropped off to sleep. Others could be found in the galley trying to squeeze the last cup of coffee out of the pot. And still others, because of the nature of their jobs, remained alert at their stations until the plane touched down back at Keflavik.

Back on the ground, the crew somehow came up with reserves of energy as thcy moved about securing the airplane and making their required checks.

Up in the Tactical Support Center, another scenario was unfolding. The P3C possesses yet another example of modern science called Data link. In general terms, Data link allows the computer record of the mission along with other information to be transmitted to the TSC by incredibly short bursts of radio energy while the aircraft is still in the air.

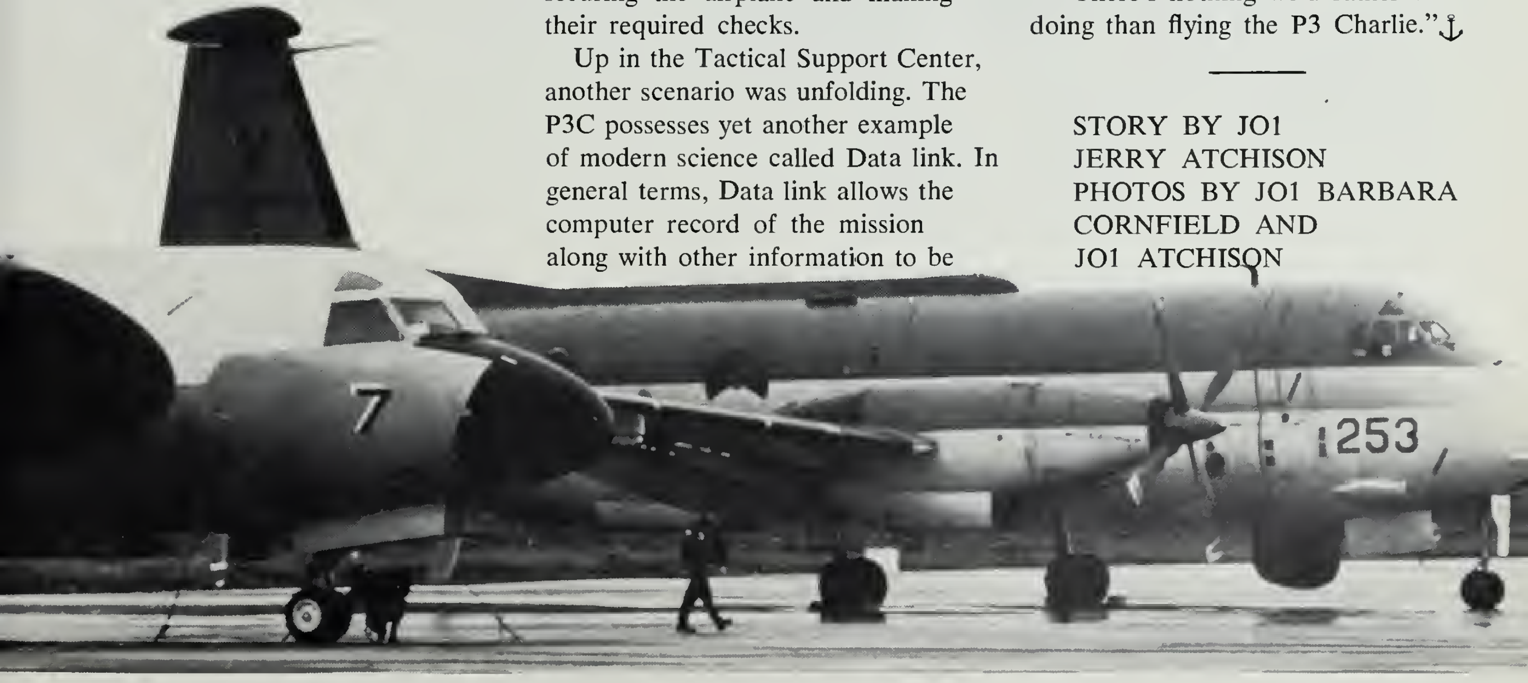
The TSC staff and P3C crew now reviewed this complete record of the mission as provided by Data link and the computer tapes taken from the plane. The entire mission could be replayed on the TSC computer screen and the events reviewed.

At 1000, 15 hours after the crew had reported to the hangar, the debrief had ended. The groggy crew left the TSC, crossed the hangar and entered the duty office. Amid groans and sighs of relief, the crew studied the next day's flight schedule. A senior chief stopped at the duty office door and nodded back towards the crew.

"You know these guys are great about griping over the long hours and hard work they've got to do," he said. "But as soon as you see them tackling the job, you know they're like all the rest of us.

"There's nothing we'd rather be doing than flying the P3 Charlie."⚓

STORY BY JO1
JERRY ATCHISON
PHOTOS BY JO1 BARBARA
CORNFIELD AND
JO1 ATCHISON



When you say "BUDS" you've said it all... almost...

STORY AND PHOTOS BY
PH3 JENNY C. HUDDLESTON

"When you say 'BUD/S'—you've said it all . . . almost."

It's definitely more than beer, at least at the Naval Amphibious Base, Coronado, Calif.

It's "hell," physical stress, mud, water, and much, much more. It's all part of the Basic Underwater Demolition and Sea-Air-Land (SEAL) training—BUD/S—at Naval Amphibious School.

The intensive 23-week program involves three phases: Phase I—indoctrination and conditioning; Phase II—diving; and Phase III—field work, as reconnaissance, demolition, and tactics.

Upon being graduated, the men are transferred to either Atlantic or Pacific fleet Underwater Demoliton and SEAL Teams.

Six weeks of the first phase quickly initiates the newcomers to the program. From 0500 to 1700, physical training, classroom work, and harassment keep the trainees busy.

Not counting the weekly 6-mile timed runs, the trainees average 4 miles daily; they swim several miles every other day. The "real builder," however, is the obstacle course.

The course is designed to build muscles and endurance, as the 21-obstacle nicknames foretell—such as Weaver, Slide-for-Life, Belly-buster, Tarzan, and Dirty Name. But it's the time that makes it tough. For the individual, a 20 to 25-minute time is great. Still, that won't do for BUD/S, the course must be run in under 15 minutes.

"Desire is the biggest thing a man needs when he gets here," stressed Lieutenant Doug Huth, training officer. "We can get him into shape."

Only half of the 80 to 100 men who start Phase I go on to graduate. "Hellweek," however, is the main eliminator. Six days interspersed with little sleep and continuous physical stress are not a piece of cake. This fourth week of training starts at 0100 on a Monday morning.

"OK, on the whistle, drop to the ground with your hands covering your head," the instructor barks. "Two whistles mean crawl toward the person who gave the command; on three whistles, resume original positions."

An instructor's disconcerting laughter is barely audible over the sounds of machine gun fire, whistle, flares, and demolition charges.

One whistle . . . two whistles . . . three whistles . . . one whistle—are as rapid fire as the machinegun.

At 0400, the "tadpoles" are given the next order. "Prepare for drownproofing." Using their trousers as flotation aids, they buoy themselves in cold water for the next hour.

Every evolution is designed to simulate the physical and mental stresses of combat. This is the way things go for the next three days.

(→)

...almost

By Wednesday, the trainees are paddling boats 14 miles to the dreaded mudflats. There they set up "Camp Swampy"—rows of tents, a firepit, and disposal area. Not exactly resort living.

Soon after arrival, it's off to the waterways to "play in the mud." The men race forward and backwards through the grime. The mud seems to get thicker and deeper in proportion to the trainees' effort.

"This mud is very therapeutic, men," one instructor quips. "Yeah, lots of people pay good money for mudpacks, but you men get it for free," another echoes.

And dining at Camp Swampy is not the Ritz by any means. The menu consists of C-rations.

Later, standing in formation by their tents, the men watch the sun set. For the wet, cold "tadpoles," it sinks much too quickly, as they prepare themselves for their fourth sleepless night.

One "tadpole" must always be on watch, calling out the phrase, "All is well in Camp Swampy, the sunny camp by the sea," every 30 seconds. After 3 minutes, another man takes his place; and, so it goes throughout the night.

In the morning, breakfast comes in the form of freeze-dried delicacies, Long Range Patrol Rations. When mixed with water, it forms a strange-looking potion. It's not the most visually stimulating breakfast one could eat. One trainee exclaimed, "It looks

recycled, but when you're hungry. . . !"

To help pass the day, they move onto the beach where competitive games are played in the sand. "It pays to be a winner," fellow teammates yell to each other. The prize—a few precious minutes of relaxation, while the losers press on.

That evening, the "tadpoles" paddle back to the training center. Through that night and the following day, it's more of the same . . . one hectic activity after another.

With Hell-week rapidly drawing to a close, an instructor praises the weathered men. "I would be proud to go into combat with each of you. You have all proven yourselves—so far."

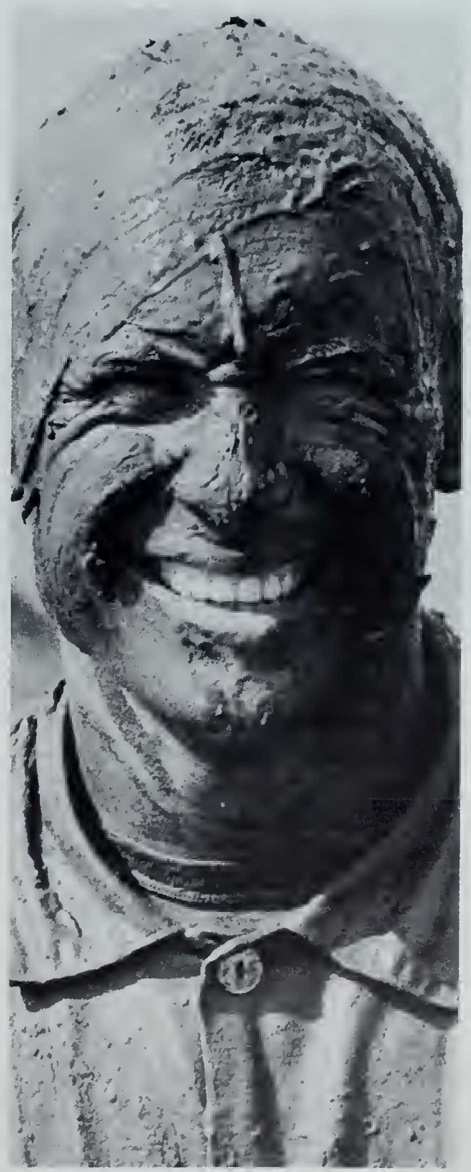
When told that it's over, the disbelieving "tadpoles" tear up in pride, too exhausted to cheer. Knowing the trainees all too well, an instructor warns, "Go to the barracks and get some sleep. Don't be foolish enough to go out in town and celebrate. You'll have plenty of time for that later."

On Monday, the trainees turn their attention to the next two phases of training.

Since the first phase is "hell," the trainees know that the rest of the program will be no picnic. Ahead are more physical exercises and even more technical training.

They've only just begun to realize what BUD/S really means.

When you live through BUD/S, you've lived through it all! ⚓



USS RATHBURNE

Port-O-Call: Fukuoka

Despite a constant drizzle and occasional heavy showers, more than 8,500 visitors recently toured the frigate USS *Rathburne* (FF 1057), the first American warship to visit the ancient Japanese city of Fukuoka in more than 12 years.

Fukuoka, a city of more than a million people, was, in ancient days, known as "NA" and is generally thought to be the locale where the Japanese culture had its beginning. Located on the northern coast of Kyushu, the southwestern-most island of Japan, Fukuoka has been the site of foreign culture and economic exchange for more than 2,000 years.

Through softball games, tours, receptions, and even a donation of free pizzas, *Rathburne* crewmembers discovered a harmonious blend of ancient beauty and tradition mixed with a lively and modern Japanese metropolis. Many crew members, invited into homes of Fukuoka residents, experienced the lifestyle of the modern day Japanese.

Rathburne, homeported in Pearl Harbor, is assigned to the Seventh Fleet.

Midshipmen of Two Nations Train

The guided missile destroyer USS *Parsons* (DDG 33) and her sister ship USS *Somers* (DDG 34) recently completed a successful joint operation between the United States Navy and the Japanese Maritime Self-Defense Force off the coast of Japan.

Participating in the exercise were the JDS *Amatsukaze* (DDG 163), JDS *Hiei* (DD 142), JDS *Natsugmo* (DD 117) and JDS *Murakumo* (DD 118).

These six ships executed a series of drills that included tactical maneuvering, communications, underway replenishment, and surface and air tracking. Aboard *Parsons* during the two-day exercise were 10 Japanese midshipmen from the Officer Candidate School at Kure. The 10 were involved in a yearly summer midshipmen exchange program between the U.S. and Japan.

Purpose of the exchange was to indoctrinate future officers with the understanding of how their counterparts think and act, and mutually to share ideas and capabilities.

The 10 cadets experienced the techniques and equipment necessary to operate *Parsons*, by manning the bridge and combat information center with rotation during the exercise.

This past summer's exchange program started when midshipmen from Annapolis arrived at Etajima—JMSDF's officer candidate school. Within six days of arrival they embarked on board Japanese ships at the Kure Naval Base.

The American midshipmen operated northward to Yokosuka where their at-sea training ended; the JMSDF cadets—aboard *Parsons* and *Somers*—returned to Kure to complete their remaining year before being commissioned as ensigns. The Annapolis contingent spent three days touring Japan before returning to the States.

40,000 PQS Points

USS *Buchanan* (DDG 14) conducted a 3-day PQS Stand-up, 26-28 July, while in transit from Pattaya, Thailand, to Subic Bay, Republic of the Philippines.

"PQS"—Personnel Qualification Standards—is the primary system for training personnel in the surface Navy.

The "Stand-up," a novel idea, served to provide an opportunity for all *Buchanan* crewmembers to concentrate on their personal qualifications. During the three days, a total of nearly 40,000 PQS points were earned by the *Buchanan* crew.

Quality control procedures, however, ensured that the outcome was increased training and professionalism, and not merely point collection. The end result of the PQS Stand-up has been an improvement in the combat readiness of USS *Buchanan*.

The Navy is HARD WORK...

...Except when Shields

BY LTJG CRAIG W. PATTON
AND JO2 BOB HAAGENSON

Sailing under the Southern Cross, combing beaches on a South Seas island, and sitting cross-legged in a grass hut drinking fresh coconut milk are scenes most people only dream about. The "shellbacks" in USS *Marvin Shields* (FF 1066) experienced them all during the first week of June.

Aboard *Shields,* scuttlebutt quickly changed to the straight skinny when word was received that the Government of Western Samoa had officially requested a U.S. Navy ship be dispatched for a friendly visit to the islands. For three days and nights, the men of *Shields* became America's goodwill envoys during the island nation's 15th Independence Day celebration.

Charts, unused for years, were dusted off in the ship's charthouse (no one could find any official record of the last time a U.S. Navy ship had visited Apia, W.S.), and *Shields'* crew made ready for entering port. Yet, before Apia was even in sight, the festivities had begun topside.

Crossing into the Southern Hemisphere was a first for many of *Shields'* officers and men and none of the "polliwogs" escaped Neptune's traditional greeting as they crossed the line. After such an "enjoyable" party, it's no wonder that many *Shields*men

visits Western Samoa

welcomed the sight of the Samoan Islands as King Neptune descended to Davey Jones' Locker.

Shields arrived in Western Samoa at dusk on May 31 and found Apia's harbor reminiscent of scenes from Kon Tiki and Mutiny on the Bounty. The tranquility, however, was soon disturbed by the bustle of tying up, rigging display lights and preparing full dress ship.

Western Samoa is a sovereign state located about halfway between Hawaii and Australia. It is one of a few places whose culture and traditions have survived the jet age unspoiled, yet it is in complete harmony with the modern world. The lush, mountainous islands have a population of about 160,000, 80 per cent of whom are pure Polynesian. All still practice the customs first witnessed by 19th century English and American missionaries who sailed to the South Pacific paradise.

Apia's population—normally 30,000—swells to about twice that each year as the independence celebration commences. Samoans come to the capital to join in the parades, dances and fautasi—long boat races. The celebration officially began June 1 when the Western Samoan flag was raised at Mulinee (the nation's House of Parliament), and a 21-gun salute was fired in honor of the independent Polynesian state. (→)

For the people of Western Samoa and the men of *Shields*, this year's Independence Day celebration, the island nation's 15th, will not soon be forgotten.

(Until 1962, Western Samoa was a United Nations Trusteeship under the administration of New Zealand.)

Following opening ceremonies, a number of dignitaries—including ambassadors from more than a dozen nations, Western Samoa's Head of State, King of Tonga, and cabinet ministers—all watched the fautasi from the best seats in the "house"—*Shields*' 02 deck.

(Recognizing these dignitaries at the brow presented no small problem in the eyes of the quarterdeck watch officer. It was soon resolved, however, when a dignitary's press secretary donned a pair of sound-powered phones and announced each official to the quarterdeck. Rendering honors, as one after another arrived, went well afterall and was a task the eight sideboys will not soon forget.)

The fautasi is one of the most unusual and colorful races in the South Pacific and is roughly equivalent in its ability to incite national interest as our own Super Bowl and World Series combined. Eight boats, each about 50 feet in length and propelled by 40 rowers, race a five-mile course for large cash awards presented by the government. According to several *Shields*' sailors, seeing the race and nothing more still would have made the visit a good one.

After the fautasi, *Shields* opened her brow to the first of more than 6,000 Samoans who visited the warship during the next two days. Visitor interest was high and there was no language barrier since nearly all the natives speak English. Those who didn't, enjoyed the tour anyway as *Shields*' tourguides used hands and smiles to answer inquisitive gestures. Visitors were fascinated by the entire ship, but the embarked LAMPS helo was a prime attraction. For many, it was their first glimpse of a whirlybird.

A carnival atmosphere prevailed as vendors displayed (and sold) their wares ranging from whole roast pig to fragrant hibiscus arrangements. American sailors strolling the island's streets were met with curious and friendly smiles; many soon found themselves engaging in conversation and eating food in a Samoan home.

Samoan life revolves around the family unit—aiga—and its head is the matai who speaks for the family. Navy visitors shared a native drink made from coconut milk (Kava) and quickly learned some essentials of Samoan etiquette. For instance, few Samoan homes have chairs and visitors and family alike sit on the floor with their legs crossed under their bodies. It is a serious faux pas to sit on the floor with your legs outstretched toward the center of the room. If one is unable to assume such a position, he is required to place a mat over his outstretched legs.

Sailors returned the hospitality by bringing their new-found friends on board ship for a private tour.

The final day of the celebration traditionally focuses on the family. Many family reunions and parties are held, again pointing to the importance and closeness of the family unit in Polynesian tradition. *Shields*' sailors took that opportunity to do some souvenir shopping on the island. The most popular items purchased were grass skirts, lava-lava (wrap arounds), woven mats, baskets, Samoan wood handicrafts, and other items reflecting Polynesian heritage.

Early on June 4, *Shields* got underway and continued westward leaving behind the glow and goodwill of Samoan friendship and hospitality. The hard work and preparations aboard ship had been more than balanced by the genuine good times on the beach. For the people of Samoa and the men of *Shields*, it was a port visit not likely to be forgotten. ⚓

JOHNSTOWN FLOOD

RESERVE CENTER SHELTERS FLOOD VICTIMS

BY JO2 RICH BETH

The Johnstown Flood is no longer a memory kept alive by the retelling of how, in 1889, a reservoir burst in the narrow river valley killing more than 2,200 people and leaving much of the city in a deluge of mud.

It happened again last July 19. An eight-hour, flash thunderstorm dumped nearly a foot of water on the southwestern Pennsylvania city causing four dams to burst and another to overflow, letting loose the backed-up fury of the Conemaugh River. The 1977 Johnstown Flood claimed the lives of at least three dozen persons and, like the first flood, left the city buried in a sea of sludge and debris.

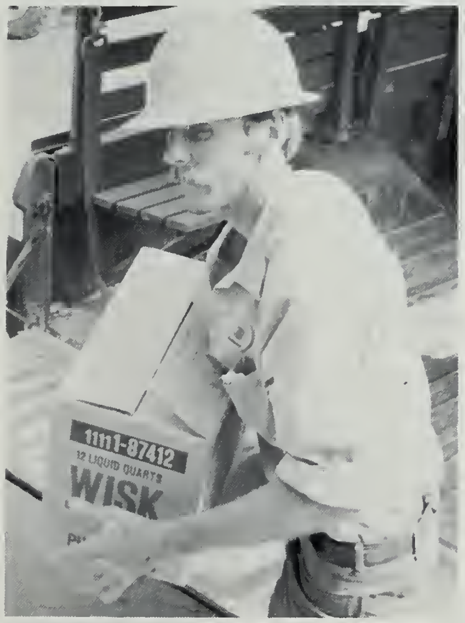
Cars and trucks were tossed about like toys in a tub; trains were yanked from their tracks and deposited as far as one-half mile away; and homes and office buildings crumbled under the pressure of rapidly rising flood waters. Hundreds of residents sought and found refuge in the Johnstown Naval Reserve Center.

Navy men and women from the city and nearby Altoona immediately set up emergency relief centers and began evacuating the homeless to surrounding communities. Local Naval

Reserve Centers stayed open around the clock providing first aid, hot food, clothing, shelter and water for flood victims.

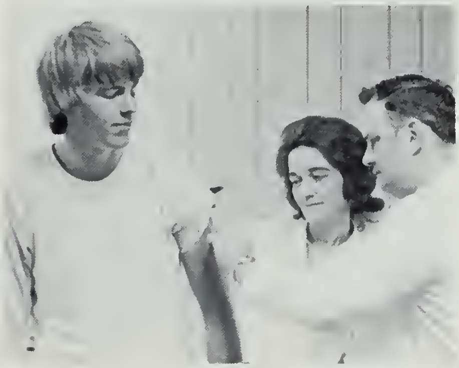
The Commandant, Fourth Naval District sent a five-man Military Affiliate Radio Stations (MARS) team to Johnstown within 24 hours to provide emergency communications to facilitate rescue and relief efforts. In less than a week, telephone service was restored and the MARS team shut down operations—they had completed a vital job.

Rescue and relief efforts were coordinated during the first week by Chief Machinist's Mate Charles Gregory, station chief from Altoona, and Chief Mess Management Specialist Robert Lawson, a Navy recruiter in Johnstown. The two continued to direct the Navy volunteers in the humanitarian effort until Lieutenant Commander Charles Bencik, commanding officer of the Reserve Center, could arrive on the scene.



When LCDR Bencik arrived, Hospital Corpsman 1st Class Steve Ulanowski and Hospital Corpsman 1st Class Dennis Billeter had already set up an emergency aid station in the center's dispensary. Assisted by civilian volunteers from the community, they treated nearly 200 injured Johnstown residents and administered more than 1,000 tetanus shots.

In the Soloman Run section of the city, Yeoman 2nd Class P. J. Carpenter, Personnelman 2nd Class Bob Crowe, and Hospital Corpsman 1st Class Ricky King (from NRC Philadelphia) provided on-the-scene relief to victims. King established an aid station in the home of a Johnstown citizen and, during the ensuing week, treated 450 patients, assisted by nurse Karen Ruffner and Carol Gerula.



Meanwhile, Carpenter and Crowe delivered food, cleaning supplies and water to elderly residents and others unable to get to the distribution centers which had been set up around the city. When the going was too rough for their four-wheel-drive National Guard truck, Carpenter and Crowe delivered supplies on foot. As they made their rounds, they comforted families in need; many had lost everything they owned.

Volunteers arrived daily from other organizations including the Salvation Army, Pennsylvania National Guard, and other Navy units—some sent volunteers from as far away as Jacksonville, Fla. All the relief units worked together distributing supplies and rendering first aid. Citizens from surrounding communities and local business people donated additional food, supplies and comfort items.

By the end of the month, the immediate job of relief and search and rescue had begun to wind down. On August 1st, Altoona personnel returned to their center and the Johnstown Naval Reserve Center's hours of operation were reduced. Though operations are diminished, the center continues to supply support to the community in every way possible and will do so until no longer needed. According to a spokesman from the Pennsylvania governor's office, that could be as long as two years, the projected time to restore the flooded community to normal.

(⟶)

JOHNSTOWN FLOOD

I THOUGHT IT WAS JUST ANOTHER STORM

BY JO1 ANDY TURNER

When the Conemaugh River burst over its banks in the early morning hours of July 20, it started the devastation of Johnstown, Pa., a supposedly flood-proof city of over 40,000.

It wasn't the first time Johnstown had been flooded. The city is built at the confluence of the Little Conemaugh River and Stony Creek, a location rich in beauty and convenience, but historically lacking in safety. The "Great Johnstown Flood" in 1889 was the first disaster. More than 2,000 people were killed and damage exceeded $20 million. A flood in 1936 claimed only a few lives but again destroyed the city, much of which is only a few feet above the river. Flood control projects then undertaken supposedly ensured that Johnstown residents could rest easy.

But this July 19, a thunderstorm rolled in from the west at about 9:30 p.m. and, according to the weather service, "simply stalled" over the Conemaugh River Valley. When the rains stopped at 5:30 the next morning, the gauges had recorded an incredible 11.2 inches of rain.

"When I went to bed, I thought it was just another rainstorm," said Chief Radioman John Neatrour, one of the four Navy recruiters assigned to the recruiting station in Johnstown. It was much more than that though. The death toll now stands at 73 with 15 still missing. Estimates of the damage exceed $250 billion.

The high number of deaths are attributed to the storm's timing. Most area residents went to bed feeling certain that the crashing thunderstorm would end soon. When the flash flood warning was issued early in the morning, there were few people awake to hear the warnings on radio.

The situation at sunrise was almost unbelievable. "I got up and dressed as usual," said Senior Chief Yeoman George Pappas, Johnstown recruiter in-charge. "I started to drive into town, but the road was closed. Then I realized how bad things were. I drove home, changed into some old clothes, and, by 11 o'clock the water had receded enough, that I could wade to the office.

"It was an awful mess," he said. "The water had gone right through the building, knocking down the interior walls and washing a lot of equipment and files down the river."

Johnstown's Navy and Marine Corps Reserve Center was more fortunate. Located on a slight rise, water came to within 100 feet of the armory before subsiding. The reserve units, led by Officer-in-Charge Lieutenant Commander Charles A. Bencik, began an immediate mobilization. Residents of nearby flooded areas took shelter at the armory where hot meals were prepared over charcoal fires.

Reinforced by personnel from the Naval Reserve Center in Altoona, 30 miles away, the center helped initially with clearance of debris and traffic control until National Guard and state police units arrived to assume security functions. Medical assistance was also provided by the reserve units. A Military Affiliate Radio Station (MARS), supplemented by personnel from the First and Fourth Naval Districts, opened to allow local residents to call friends and relatives outside the area. Over 300 MARS-Grams were sent before telephone service was restored several days later.

One of the most popular attractions at the armory was one of Johnstown's few operating showers. Personnelman 2nd Class Robert Crowe rigged garden

hoses from a spring through a bleach bottle connection to provide water to a shower stall, built with a punctured washtub and used lumber.

By a chance of fate, Navy personnel stationed in the area were, for the most part, spared personal injury or serious property damage. The only major loss was suffered by Yeoman 1st Class Clifford Dillon who lived in downtown Johnstown—his car was washed away in the rampage.

Life still isn't normal in the Conemaugh Valley. Although signs stating "We will rebuild together" are everywhere, the damage may take years to clean up, but clean up they will.

The Navy is back in the recruiting business with a "Recruitmobile" operating in a mall parking lot.

But for residents of the area, the term "floodproof" is only a bad joke, and the memory of that night will always be vivid in their minds. ⚓

Indy fights Capri fire

BY JO2 J. PFIZENMAIER, JR.

It was an hour before midnight. With most of her crew on liberty, USS *Independence* (CV-62), anchored in the Bay of Naples, lay silent. The duty section noticed a red glow on the Isle of Capri.

In a few minutes, they would find out that the red glow marked the location of a brush fire raging out of control.

An urgent message from the Mayor of Capri was received, requesting Navy assistance in putting out the fire. The ship sprang to life. Within 30 minutes, 200 volunteers stood ready in the hangar bay.

The first group of 50, made up primarily of men from the ship's repair parties and flight deck personnel experienced in handling fires, was transported to the island to take stock of the situation.

What they found was discouraging. There were no roads to the fire area, which was situated on the face of an inaccessible cliff.

Loosened rocks, debris and burning timber cascaded down the cliff face making firefighting not only difficult but dangerous.

So rather than trying to put out the fire, they decided to keep it from spreading.

One hundred twenty-five more crewmembers from *Independence* arrived at the island and made their way on foot to the fire. Additional firefighting teams stood by on the ship but transportation was limited.

Armed with shovels, fire axes and blankets, the volunteers formed lines between populated areas and the fire and started the seemingly endless task of extinguishing flying sparks and embers and smothering burning logs and stumps. Shifting winds only added to their difficulty.

Perseverance and hard work were rewarded. More than nine hours later, the fire was under control.

Heartened by the profuse thanks of the islanders, USS *Independence's* firefighters, exhausted and blackened with soot and smoke, returned to their ship, satisfied with a job well done. ⚓

Bearings

Reduces Target Loss

For those accustomed to the stately motion of an aircraft carrier at sea, the sometimes unpredictable movements of a small boat can be a shocking experience—especially if the craft happens to be a PT boat.

It may seem unusual for a PT boat to be operated by a crew of "airdales," but it's true. There's only one like it and Fleet Composite Squadron SIX (VC-6) of the Amphibious Base in Little Creek owns it.

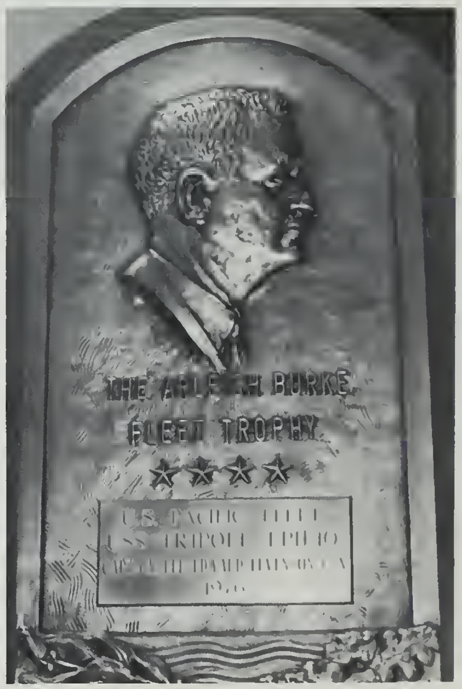
PT 809, now dubbed drone recovery vehicle one (DR-1) was one of a limited number of aluminum-hulled PT boats built after WWII. The boat spent an early portion of its life in operation with the Secret Service before VC-6 acquired it. The squadron had a need to provide both air and seaborne remote controlled target services for the Atlantic Fleet.

As a drone recovery craft, the DR-1 has reduced target losses while at the same time extending the on-station target practice time, and lowering, as well, operating costs for ship and air crews. Additional savings result from the fact that work on the drones can be done on board the DR-1. Salt water decontamination can be started immediately upon recovery by the craft, which reduces the number of corrosion control man-hours later required to restore a drone to operational status.

A drone can also be launched and controlled from the DR-1's deck while underway. The craft can therefore be used to simulate an attack sequence for a small, high-speed missile platform and the drone can be flown to duplicate any desired anti-ship missile profile. Smaller seaborne-powered targets can also be controlled from DR-1 to present targets for retaliatory strikes from tactical aircraft.

The end result of the DR-1's capabilities is the opportunity it gives an operating force to meet and train against a multithreat challenge.

Top Two Named



The "Smokin' Tigers" of Reconnaissance Attack Squadron ONE (RVAH 1) became the first Atlantic Fleet aviation squadron to receive the Arleigh Burke Fleet Trophy while the helicopter transport ship USS *Tripoli* (LPH 10) took the honors for the Pacific Fleet.

The trophy, established in 1961 to honor former Chief of Naval Operations Admiral Arleigh Burke, exemplifies battle readiness and is awarded annually to the Atlantic and Pacific ship or aircraft squadron which exhibits the highest degree of preparedness improvement during the fiscal year competitive cycle.

The Key West based RVAH 1, deployed aboard aircraft carriers on both coasts in the past, was part of the USS *Enterprise*/Air Wing FOURTEEN team and participated in buildups and an eight-month cruise to the western

Pacific during fiscal year 1976. The "Smokin' Tigers," flying RA-5C Vigilantes, successfully fulfilled their mission of providing day and night tactical reconnaissance to the on-scene commander.

The Coronado, Calif.-based *Tripoli*, aside from fleet exercise participation, assisted in recovery operations relating to Typhoon Pamela at Guam and took part in a nationally televised demonstration of landings and takeoffs of two AV-8A Harrier aircraft.

A Diver's Dream

Clear water, good air, a cold drink and a mermaid to share it all with—sounds like a diver's dream. For some it is but for Navy diver Gary D. Layne, it actually happened.

Layne, leading diver aboard the Fleet Ocean Tug USS *Tawakoni* (ATF 114) out of Pearl Harbor, demonstrates what a diver can accomplish underwater while wearing a heavy MK V deep sea outfit. He actually drank the coke—and the mermaid—well, she was just for show.

He's Still a Master

You'd think that after winning four first-place and two second-place awards in the 11th Naval District Championships at the San Diego Naval Training Center, Lt. James T. Slaughter would give swimming a rest. But such is not the case. He still dons his goggles and goes through his usual routine—a 1500-meter (1 mile) swim at the local pool. Practice, it seems, makes perfect.

Slaughter, who's director of the Construction School at the Construction Battalion Center, Port Hueneme, Calif., began swimming in the AAU when he was 17 and continued when he entered the Naval Academy in 1963.

He considers 1974 his best year to date. His qualifying times in three breast-stroke events ranked him among the nation's top 10 in the AAU Masters Swimming Program.

Not one to downgrade his recent San Diego achievement, Slaughter qualifies it slightly—"There was very little competition in the masters category, probably due to the fact that the Underwater Demolition Team members were unable to compete."

Maybe that explains why he still tackles the daily mile swim.

Bearings

Herd Checking

From flying reconnaissance on caribou herds in the frozen north to participating in anti-submarine operations in Florida is quite a change for three Canadians assigned to Patrol Squadron 56 (VP 56) at Jacksonville.

Warrant Officers Gordon McMillan, Roy Chrapchynski and Sergeant Eric Welin (left), members of the Personnel Exchange Program (PEP) between the United States and Canada, came to VP-56 from maritime patrol segments of the Canadian Armed Forces (CAF). McMillan, the CAF equivalent of a Navy Senior Chief Petty Officer, is a qualified P-3C "Orion" flight engineer and Chrapchynski and Welin, equivalents of Senior Chief and Chief Anti-Submarine Warfare (ASW) Operators, respectively, are qualified as "Orion" ASW sensor operators.

In Canada the men flew the "Argus" aircraft. In addition to flying ASW/ocean surveillance missions similar to those flown by the U.S. Navy in the P-3C, the CAF crews flew Arctic patrols which included reporting on caribou herds and aiding the Canadian Coast Guard in policing the 200-mile territorial fishing limit.

Deployment is nothing new for the three but there is a striking difference between the CAF and the U.S. Navy. "Argus" crews deploy to bases in both the Atlantic and Pacific but the time away rarely exceeds four weeks. Patrol Squadron 56 recently spent five and a half months in Sigonella, Sicily.

Chrapchynski and Welin are scheduled to return to Canada soon (McMillan will remain for another year), taking with them an extensive knowledge of U.S. Navy P-3C operational capabilities. Their experience with the P-3C is expected to make the CAF's upcoming transition to the long range patrol aircraft "Aurora," a slightly modified version of the "Orion," a smooth success.

Myoelectric Hand

Bringing the thumb against the index finger is a simple hand manuever for most of us, but for Hospital Corpsman 3rd Class Richard Smith, it's a mental ordeal.

Smith's right hand, amputated after an accident, has been replaced by a myoelectric prosthesis. The arm muscles and brain that once controlled the natural hand are still used to open and close the myoelectric hand as electric impulses from Smith's extensor and flexor muscles are picked up by tiny electrodes, magnified 1000 times by a power pack and transmitted to miniature motors in the myoelectric hand.

"Bionic" replacements for body parts are not as commonplace in real life as they are on television, but the future holds high promise that Veteran's Administration doctors will be able to help veterans with even more severe injuries than Smith's with even more startling applications of space age technology.

A bypass for an injured spinal cord that could make paralyzed arms and legs usable once again, and bone implants to extend an amputated arm or leg to make fitting of a prosthesis possible, are among the goals of a rehabilitation engineering and research center soon to be established in Chicago. The research center, in collaboration with the Armour Engineering Center of the Illinois Institute of Technology, will monitor the medical and engineering developments throughout the world for applications to bioengineering.

Now being tapped for use in myoelectric hands like Smith's are electronic miniaturizations, plastics, power packs and controls that are by-products of the nation's space age program.

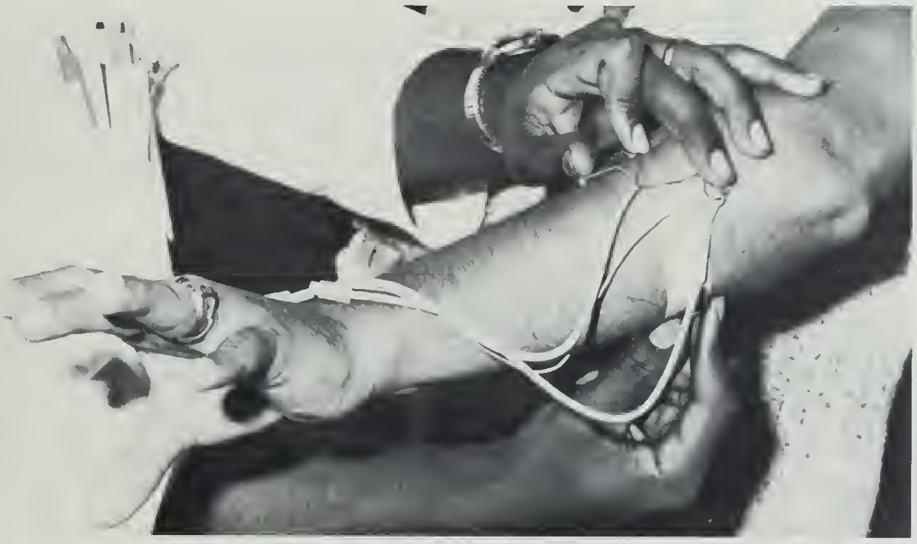
"An amputation usually means automatic separation from the military," Smith says, "but I'm going to prove that with my new hand I can still do my job."

Therapy is serious and intense work for the corpsman, according to VA therapist Barbara Grant.

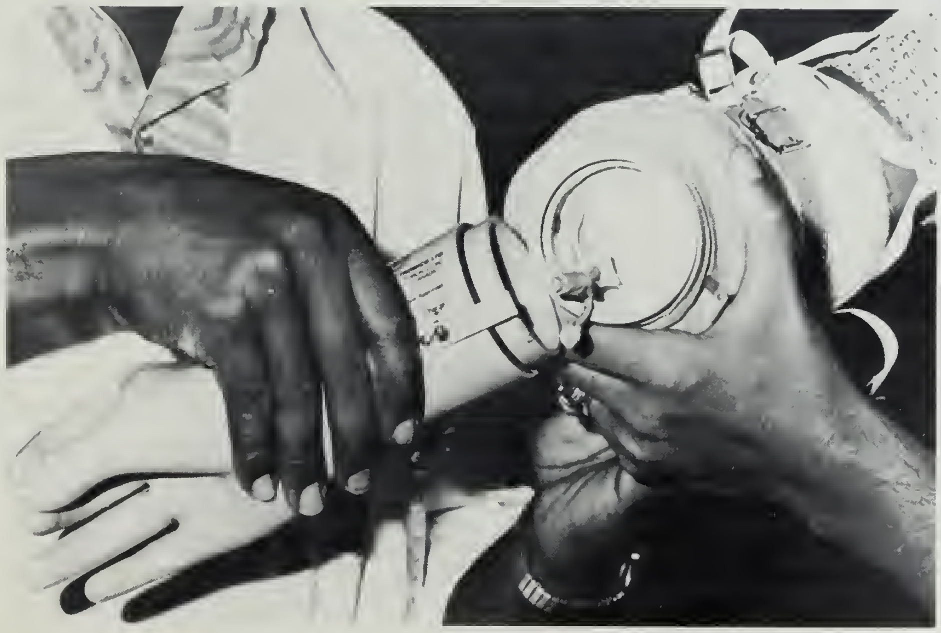
"He's confronted by psychological as well as physical obstacles," she explains. "He knows he no longer has a right hand, yet he must think as if he still had one. He must produce the same nerve impulses to the same arm muscles to operate his new hand. It takes practice and patience."

The Navy will give Smith a chance to prove his mettle. After he learns to use his myoelectric hand, a Navy review board will let him demonstrate his skill with it.

Charles J. Harland, The VA hospital's prosthetics chief, is rooting for his patient. "The myoelectric hand is far from perfected," he admits. "It can perform only one of the natural hand's six basic grips, but it does work, psychologically as well as physically, and it may well be just the forerunner of the marvels being dreamed up by science fiction writers and engineers."



Left (top): The electrodes that transmit muscle nerve impulses to the myoelectric hand fit against the skin over each set of arm muscles.



Bottom left: The myoelectric hand and power pack attach to a plastic sleeve over the amputated forearm and can be detached easily for repair or replacement.

for the Navy Buff

Launch of America's first man in space, LCDR Alan B. Shepard, Jr. (now a retired rear admiral). John Glenn was America's first man in orbit.

BY JO2 DAN WHEELER

Q. *I know astronaut John H. Glenn, Jr. was a Marine and not a Navyman, but would you tell me, anyway, the amount of pay he earned while orbiting the earth three times in February 1962?*

A. Computed on the basis of a 30-day month and 24-hour day, Lieutenant Colonel Glenn earned a whopping total of eight dollars! That includes basic pay, flight pay (since he managed to get in four hours flight time), BAS and BAQ. He missed out on per diem since he made the trip in less than 10 hours in one calendar day. Also, he wasn't paid mileage (81,000 miles × $.10 per mile) since he preferred to use a "government vehicle" rather than his own.

Q. *Is it true that some Navy ships prepared Last Wills and Testaments during World War II to govern distribution of assets jointly held by their crews?*

A. True. In fact, ALL HANDS (then the Bureau of Navigation Bulletin) featured an article about the first ship to do so in its May 1942 issue:

"The USS *Augusta* (CA 31) has drawn her will, and the Navy Relief Society is sole beneficiary. Being of sound steel and in possession of all her armament, the stout old cruiser has arranged all the details such as power of attorney and proper authority. Believed to be the first naval ship with legal testament, the *Augusta* directs in her will that the beneficiary shall receive money now on deposit in a Brooklyn bank in the event that the cruiser should become a complete casualty—that no commanding officer should survive to administer funds."

Funds on deposit often amounted to several thousand dollars accrued from ships' stores and recreation funds. Fortunately, *Augusta's* fund continued to grow and no executor was ever needed.

Q. *I'm a signalman and I didn't know the answer to this question, "Was there ever a WHAT-THE-HELL pennant in the Navy?"*

A. It took some searching, but we finally found an old-timer who admitted, for the record, that once upon a time there was such a pennant and it was used up to and during World War II (unofficially, of course).

He couldn't remember its color, but it was triangular and embossed with three question marks, three exclamation points and three stars. It was used whenever some junior officer deemed it necessary. The following examples indicate what it meant when flown with official pennants:

- WHAT-THE-HELL pennant over the course pennant signified "What's the course?"
- Flown over the speed pennant, it signified "What's the speed?"

Its use by anyone, especially a junior officer, invariably elicited the following remark from observers, especially the captain, "What the hell . . .!"

Q. *What's the largest number of volunteers the Navy has ever enlisted in a month?*

A. During the month of January 1942, the Navy enlisted 55,888 people.

Q. *Why did the Navy employ such a large number of artists to record Navy activities during World War II instead of using more photographers?*

A. We're told security was the reason—an artist can eliminate secret details which the camera discloses.

Q. *I've often seen the picture entitled "The Old Navy" in which four elderly sailors are shooting the breeze on the deck of a ship. Do you know who they were and when it was taken?*

A. Sure do. It was taken in 1888 by Assistant Surgeon H. W. Whitaker aboard USS *Mohigan.* The sailors (left to right) are David Ireland, 55; Gilbert H. Purdy, 60; John T. Griffith, 62; and John King, 54. King was originally identified as the real "steamer" among the four, having a propensity for rollicking liberty ashore.

Q. *Which submarine was the first to sink a warship in actual combat and when?*

A. Although most people don't think of submarines as vessels used in war before World War I, there were several which played an active role during the American Civil War. The first to actually sink a man-of-war was the Confederate submarine *Hunley.* She sank USS *Housatonic* in Charleston Harbor by exploding a torpedo (actually a mine attached to a spar) under her. The wave thrown by the explosion, how-

Four "old salts" aboard USS Mohigan.

for the Navy Buff

ever, swamped *Hunley* and killed her crew. (Nicknamed "Floating Coffin," the *Hunley* was responsible for the deaths of five of her crews—35 of 40 volunteers—including her inventor, H. L. Hunley.)

Q. *I have occasionally heard Guam historically referred to as "an island of thieves"—yet I've never found out why. Is there historical significance in this misnomer?*

A. Actually, this can be laid at Magellan's feet—when Magellan discovered Guam in 1523, the Spanish crew helped themselves to the abundant food, water and everything else that appealed to them. After a week of that, they raised sail to depart but discovered that the native Chamorros, emulating their example, had helped themselves to the Spanish lifeboats. Furious, Magellan dubbed the island "Isla de los Ladrones"—Isle of Thieves. It's doubtful that the Guamanians deserved such slander then and certain that they don't deserve it now.

Q. *Was USS* Monitor *the first iron ship to be used by the Navy?*

A. No, though she was the first iron ship ever to battle another ship of iron (Merrimac in 1862). The first iron vessel built for the U.S. Navy was the sidewheel steamer USS *Michigan.*

Michigan was launched at Erie, Pa., in December 1843, commissioned in September 1844, and saw service on the Great Lakes during ice-free months. During the Civil War, she was used for training and in protecting the lake borders from attempted raids and transportation of arms from Canada by Confederate agents.

In June 1905, she was renamed *Wolverine;* her original name was given to a battleship then being built. In 1912, *Wolverine* was turned over to the Pennsylvania Militia and finally, in 1948 she was dismantled by Naval Reservists and sold for scrap. Not bad for a 105-year-old ship.

Q. *Was there a "ghost" present at the surrender ceremonies marking the end of hostilities between Japan and the Allies aboard USS* Missouri *in Tokyo Bay in August 1945?*

A. Not exactly, but there were shades of the historical at that ceremony. Seems Admiral William F. Halsey used a certain American flag as a backdrop at the ceremonies. He had the U.S. Naval Academy Museum rush him the flag flown by Commodore Matthew C. Perry when he opened up Japan on his famous voyage in 1853. That same, very historical American flag hung as a backdrop aboard *Missouri* when Japanese officials signed those surrender documents.

Q. *Navy ships, as every sailor knows, are always referred to as "she," yet I saw a reference recently which repeatedly called USS* Piedmont *(AD 17) a "he." Can you think of a reason for this besides poor copy editing?*

A. Only one—it's correct. An honored guest at *Piedmont's* commissioning in 1944 was Walt Disney. After the ceremony, Disney created *Piedmont's* mascot—a drawing of "Doc" of Snow White fame. Thereafter, *Piedmont* was referred to as "Doc" Piedmont and became the only Navy ship correctly called "he."

Destroyer tender USS Piedmont *(AD-17)*

Q. *Wasn't it an American Navyman who said, "We have to pay a price for big gains"?*

A. Yes, Rear Admiral Theodore E. Chandler, shortly before he died. According to a report in the New York Times in January 1945, the ship in which Adm. Chandler served was attacked by Japanese planes. The entire bridge was ablaze and men had been "blown to bits or burned to death." Though the admiral was critically burned himself—his trousers and shirt were on fire—he staggered around the bridge helping his men until he was forcefully removed. Late that night when asked how he was feeling (a polite question from a friend), he replied, "We have to pay a price for big gains. My grandfather was a Secretary of the Navy; my father was an admiral. I had their traditions." The following afternoon he died and was buried at sea.

Q. *Who fired the first U.S. shot of World War II?*

A. The destroyer USS *Ward* is credited with having fired the first shot in the war in the Pacific—the United States' initial involvement in World War II. Not only did she fire the first shot, she sank the first Japanese submarine of the war an hour before the attack on Pearl Harbor!

Ward was patrolling a restricted area just outside Pearl Harbor. At 0350 on Dec. 7, 1941, the minesweeper *Condor* notified *Ward* via ship-to-ship radio that she had detected an unidentified object heading toward the harbor's entrance. Immediately, *Ward* went to General Quarters. No contact was made for several hours so the crew secured from GQ.

At 0637 the OOD notified the captain, Lieutenant Commander W. W. Outerbridge, that an unidentified submarine had been detected. Outerbridge went to the bridge and sighted a periscope between the target ship *Antares* and a target she was towing into Pearl. *Antares* notified *Ward* by blinker that she suspected a submarine was following her.

Ward rang up full speed and headed for the submarine. Having no alternative if he were to follow orders, Outerbridge attacked with deck guns and dropped depth charges over the sub which had dived. At 0651, *Ward* radioed Pearl Harbor the following message: "WE HAVE ATTACKED, FIRED UPON, AND DROPPED DEPTH CHARGES UPON SUBMARINE OPERATING IN DEFENSIVE AREA."

On the way into port, *Ward's* crew spied an extraordinary number of planes heading for Pearl. Soon the Rising Sun insignia on the planes' wings was visible. "I knew then," said Outerbridge, "that all hell had broken loose."

Late in 1944, USS *Ward* was sunk in the Pacific.

Q. *Is it true that at one time during World War II the Navy had several thousand ships in commission?*

A. As of Dec. 30, 1944, the Navy had in commission (would you believe?) 61,045 vessels of all types. This, of course, was a wartime fleet and included many vessels not normally used in naval service.

Q. *During the War of 1812 the battle between* Chesapeake *and* Shannon, *James Lawrence is reputed to have said, "Don't give up the ship! Fight her till she sinks!" Were his wishes carried out?*

A. No. Lawrence was taken below decks mortally wounded and died four days later on June 5, 1813. Third Lieutenant William S. Cox—a midshipman who had been promoted in battle—assumed command but had to surrender the ship. A court-martial found Cox guilty of leaving his post during the brief engagement, took away his rank and discharged him. On Aug. 22, 1952, President Truman restored Cox's rank posthumously (of course) and said, "Perhaps Cox was made the whipping boy for the loss of the *Chesapeake*."

Q. *Who was the Navy's first admiral?*

A. The first naval officer to become an admiral in the United States Navy was David Glasgow Farragut, appointed on July 25, 1866.⚓

David Glasgow Farragut

Scharnhorst Still Reigns

STORY AND PHOTOS BY
JO1 AL CLARK

It all started when he was a kid growing up in New London, Conn., and his father bought him a model ship. Since then, Aviation Machinist's Mate 2nd Class Loren Perry has made or put together, in almost precise detail, more than 50 model ships including a fleet ballistic missile submarine with a three-page miniature Playboy Magazine "Playmate" foldout on one of its bulkheads.

The foldout is three-thirty-seconds of an inch high and one-sixteenth of an inch wide.

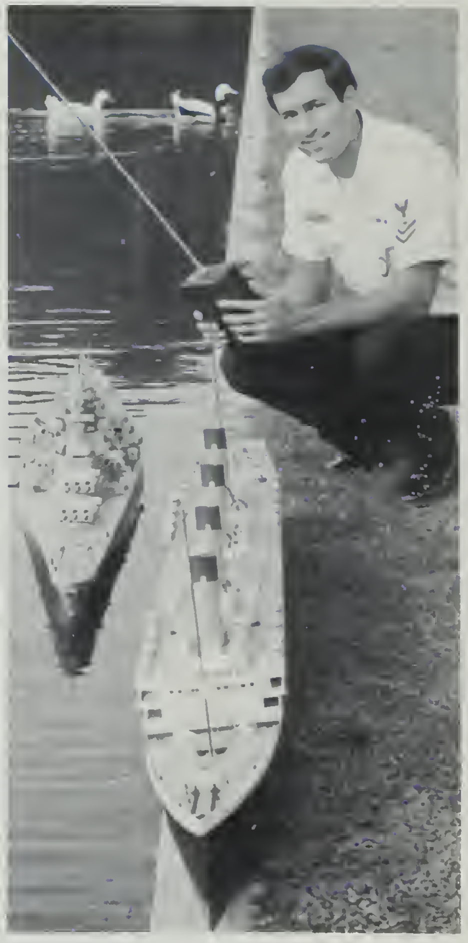
A naval reservist on temporary active duty at the Navy Recruiting District Jacksonville, Fla., Perry's favorite model is the *"Scharnhorst,"* a sleek, 8-foot remote controlled, German battle cruiser that runs on two motorcycle batteries and has an operating range of about one mile.

Scharnhorst took Perry two years and more than 2,000 hours to complete. It is meticulously made down to the last detail, including people on the bridge and uniforms authentically styled and painted.

Among its features are two gun turrets that turn, hangar doors that open and close, airplane catapults, two large boat cranes that operate and a tape recorder that plays German marching music.

Perry said he built *Scharnhorst* because he wanted to build a remote controlled ship that no one else had ever done (as far as he knows) and one that had some historical value. The real *Scharnhorst* started her reign of terror on the British fleet around 1939. She sank the British carrier HMS *Glorious,* and did almost more damage to the British fleet than any other ship.

Perry's *Scharnhorst* has achieved fame in its own right. It has been featured in U.S. newspapers and in a model ship magazine in London. The ship has also become a hit with Navy recruiters in the Jacksonville recruiting district and Perry readily consents to letting them use it and some of his other models at exhibits, fairs and mall displays.



Perry "docks" the Scharnhorst. *The other ship is the seven-foot* Titanic.

In 1966, Perry built his first remote controlled ship, the SS *Kaiser Wilhelm II,* a German ocean liner. He then built the Destroyers USS *John Paul Jones* and USS *Forrest Sherman.* In 1971 he built his *Titanic,* almost seven feet long with an operating horn, lighted interiors, a tape player and, of course, it's fully furnished.

Future additions to Perry's already formidable fleet? The nuclear powered guided missile cruiser USS *Long Beach,* followed by a nuclear carrier.

Eight-foot replica of the German battle cruiser, Scharnhorst.

Mail Buoy

Mother-in-Law of the Navy

SIR: In reviewing back issues of ALL HANDS, I ran across your answer to the question of what ships in the Navy were named *Michigan*. You did refer to the side-wheel topsail schooner-of-war, *Michigan*.

As noted, *Michigan* was built in 1842, originally as a barkentine. Her lines, including three masts and clipper bow, looked very much like the old wooden sailing ships. She had a flat bottom with five hollow keelsons.

The ship's complement was 11 officers and 87 men. She was to have carried substantial armament but the Rush-Bagot Treaty agreed that there would only be one warship on Lake Erie having one gun only. The two original boilers drove the ship at eight knots. (In those days, there was no automatic reverse, so docking was quite an art.)

Michigan was constructed in Erie at the same shipyard where Daniel Dobbins had built Oliver Hazard Perry's fleet in 1813. Her launching on Dec. 5, 1843 was inauspicious. All the efforts of shipyard personnel to free her failed. But during the night, since she only had a four-inch keel, *Michigan* launched herself and the dawn showed her free-floating.

In terms of battle and glory, the *Michigan* did not have much of a history. She ended up with only one gun and fired it only in practice.

Since she wintered three or four months each year in Erie, duty aboard *Michigan* was highly desirable. In fact, because of the active winter social life there, many naval officers and men married Erie girls. So many, in fact, that Erie was once known as "the mother-in-law of the Navy."

During the Civil War, she guarded a prisoner-of-war camp on Johnson's Island, near Sandusky, Ohio. In 1905, the *Michigan* name was taken from her and given to a super dreadnought. She was renamed USS *Wolverine*.

In 1917, she was made part of the U.S. Naval Reserve Force. Ten days after war was declared with Germany, her 101-man crew marched off to the Philadelphia Navy Yard, where they were integrated into other Naval units.

After the war she continued to sail with volunteer crews on training. But in 1923, 80 years after her launching, she broke a connecting rod and limped into Harbor Beach, Mich. The Navy department refused to authorize repairs. Two years later she was towed to Misery Bay (where Commodore Perry's fleet wintered), her final berth. Even then she put up quite a fight, grounding the tug as her last gesture.

In January 1943, the name *Wolverine* was taken from her and given to an aircraft carrier. (That was her World War II effort.)

In June, 1949, she was scrapped. Only her bow was saved and now stands beside the replica of Perry's final flagship, USS *Niagara*, at the foot of State Street in Erie, Pa.—LCDR M. L. Carr

Computing Retired Pay

SIR: Clarification is requested concerning the correct pay scale to be used in computing retainer pay for enlisted members transferring to the Fleet Reserve. BuPers Manual, 2630100, states that retainer pay is computed at the rate of two-and-one-half per cent of the basic pay being received at time of transfer, multiplied by the total number of years of active service (including constructive service). In paragraph 3.b of BuPers Manual, 2630100, it further states that a part of a year of member's total service creditable for basic pay, that is six months or more, is counted as a whole year.

BuPers Instruction 7220.27 states that six months or more is counted as a whole year in computing total active service for multiplier purposes and total service for basic pay purposes. Example: 21 years, 6 months of active service counts as 22 years for retirement multiplier and 22 years for basic pay purposes.

In the preceding example, which pay scale will be utilized for computation of retainer pay: over 20 or over 22 pay scale?—PNC J. P. Allen.

- *Computation of retainer pay in the example cited would be based on the over 22 years scale.*

That segment of the first sentence of BuPers Manual, 2630100, stating "at time of transfer" is often misconstrued, since on the day prior to transfer to the Fleet Reserve an individual receives active duty pay computed without the benefit of applying the "six-month rule." The following day, however, the member receives "retainer pay," which does include in its computation, application of the six-month rule. Additional time creditable as a result of this rule obviously allows many individuals to base their retainer pay on a longevity scale never attained while on active duty. A literal interpretation of the sentence in question could, therefore, lead to an incorrect conclusion.—ED.

Rope-Yarn Sunday

SIR: I'm an 80-year-old reader of ALL HANDS. Being old Navy (1912-1916), I got a kick out of "For the Navy Buff" in the April issue. Here's one you might be able to use. What is Rope-Yarn Sunday and how was it observed?

During peace time—before World War I—every Wednesday was Rope-Yarn Sunday. After morning clean up, all hands stood inspection by the captain or executive officer. This was inspection of uniform, haircuts, sea bag and hammock. All gear was laid out on the deck during the inspection. All clothing was rolled and tied with short pieces of white twine (short stops). Every sailor had to have a complete set of uniforms—both blues and whites.

After dismissal and unless you were on watch, you had the rest of the day off.

If the ship was in port or in the Navy Yard, visitors were allowed on board and men were detailed to show them about and answer questions about the guns and other equipment. One-half the crew had liberty in port from 1300 to 0800 the following day.

I had boot camp training at Newport, R.I. I then served a week on the old frigate *Constellation* which was a station ship along with the *Riena Mercedes*. This was a Spanish cruiser that was beached before the battle of Santiago in the Spanish-American War. Later she was refloated, her masts removed and used as a barracks ship.

I left Newport on the armored cruiser *Montana*, later renamed the *Helena*. I was then transferred to the battleship *Minnesota* for three years until she was decommissioned at Philadelphia. I then went to Cuba on the *South Carolina* for one month, then to the old mine layer *San Francisco*.

One other thing might be of interest: The sister ships *Montana* and *Tennessee* both were renamed—*Montana* became *Helena* and *Tennessee* became *Memphis*. Both were lost on the Cuban coast. The *Helena* dragged anchor and went aground and the *Memphis* was hit by a 30-foot tidal wave and driven ashore. As you know it's an old sailor's belief that to change a ship's name is bad luck. This seems to prove it. All guns were later salvaged.—Joe Barry

Reunions

- USS *Hunt* (DD 674)—Planning reunion of WWII veterans. Contact Donald Inman, 12970 Hwy 8, (Sp 125), El Cajon, Calif. 92021.

- USS *Wadleigh* (DD 689)—Planning 1978 reunion. Contact Elwood East, 107 Cheapside, R-705, Lexington, Ky. 40507.

- *NROTC Unit, UC Berkeley*—Planning reunion in 1978. Trying to update locator file. Contact YNC McCormick, NROTC Unit, 25 Callaghan Hall, University of California at Berkeley, Berkeley, CA 94720.

- USS *Laffey* (DD 724)—Planning reunion in 1978. Contact Robert H. Daugherty, Brooke Mobile Court, Lot 16, R. D. #1, Wellsburg, W. Va. 26070.

- USS *Ommaney Bay* (CVE 79)—Planning a reunion. Contact John Mitchell, Box 127, Phelps, Wis. 54554.

- USS *Henrico* (APA 45)—Reunion in October 1980. Send names and addresses of crew to Don Soper, P. O. Box 627, Platte City, Mo. 64079.

The Log Book

Here are some more excerpts from ALL HANDS articles of days gone by.

35 YEARS AGO

- Under a new plan, effective immediately, men who enlist in the Navy, Coast Guard, Naval Reserve or Coast Guard Reserve will have the option of receiving their clothing allowance in cash instead of goods. The allowance, based on the cost of a complete outfit of clothing, currently amounts to $133.81. After a year's service, the men will receive a clothing maintenance allowance of $8.75 per quarter. Heretofore, clothing was issued only, cash allowance not being available.

- On the morning of Dec. 7, 1941, Japanese aircraft temporarily disabled every battleship and most of the aircraft in the Hawaiian area. Other naval vessels, both combatant and auxiliary, were put out of action. Certain shore facilities, especially the Army air bases Hickam and Wheeler Fields, and the naval air stations Ford Island and Kaneohe Bay, were damaged. Most of the ships are now back with the Fleet (December 1942). The aircraft were all replaced within a few days, and interference with facilities was generally limited to a matter of hours.

25 YEARS AGO

- Ship grafting "operations" have joined sections of two ships to two damaged warships in drydock at the Long Beach (Calif.) Naval Shipyard and Bayonne, N.J. annex of the New York Naval Shipyard. On the west coast, the bow of the unfinished *Seymour D. Owens* was grafted to USS *Ernest G. Small* (DD 838). At Bayonne, a portion of the bow of USS *Hornet* (CV 12) became an integral part of USS *Wasp* (CV 18). *Small* was damaged by a mine in Korean waters and lost her bow. *Wasp* sustained a huge gash in her bow in a collision with USS *Hobson* (DMS 26) in the Atlantic.

15 YEARS AGO

- While en route to the Caribbean for Springboard 1962, USS *Cutlass* (SS 478) began active operation of the first underwater ham radio station. The station transmits under the call sign W4NMK, the personal call of Lieutenant Commander J. D. Reilly, Jr., commanding officer of *Cutlass*. In the first two weeks of operations, 250 separate contacts were made, including 31 states, the District of Columbia and 15 foreign countries. Regularly scheduled contacts with the ship's homeport of Norfolk have been made through the courtesy of K4TGA. The men of *Cutlass* have therefore been able to call their homes, through a phone patch system, from any point on or below the Atlantic.

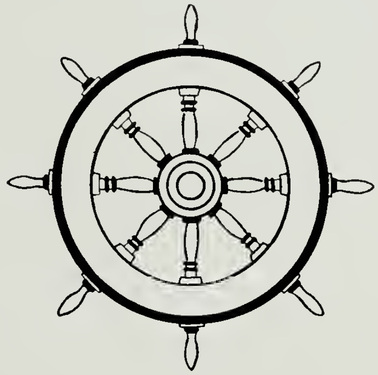
Stern Shots

"Steady as you go"

Conning a ship leaves no margin for error — or misunderstanding. To the uninitiated on the bridge of a ship, it may sound as if the helmsman and conning officer are speaking in their own code. Actually, they are using standard commands and responses, each with its own precise meaning. In this quiz, match the command to the helm with the appropriate phrase or meaning.

COMMANDS

1. Right handsomely
2. Meet her
3. Rudder amidships
4. Steady as you go
5. Shift your rudder
6. Mind your rudder
7. Increase your rudder to ______ degrees



DEFINITIONS

A. Steer exactly, using less rudder

B. Decrease the rudder angle

C. Change from right to left rudder (or vice versa) an equal amount

D. Turn rudder right a small amount

E. Rudder angle zero

F. Do not steer to the left of the ordered course

G. Rudder is already over; it is desired to make her turn more rapidly by using more rudder

H. Steer the course on which the ship is heading

I. Use rudder as necessary to check the swing of the ship

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Answers: 1(D); 2(I); 3(E); 4(H); 5(C), 6(A); 7(G)

Stephen Decatur

Commodore USN

IN THE THICK OF BATTLE, THE 25 YEAR-OLD CAPTAIN, STEPHEN DECATUR BROKE HIS CUTLASS AND WAS CONSEQUENTLY WRESTLED TO THE DECK BY A GIANT MUSCULAR TRIPOLITAN. BY WARDING OFF HIS OPPONENT'S DAGGER WITH HIS LEFT HAND DECATUR WAS ABLE TO FIRE HIS PISTOL THROUGH HIS RIGHT COAT POCKET KILLING THE PIRATE.

THE DATE WAS AUGUST 3, 1804. IT WAS THE BATTLE FOUGHT IN THE TRIPOLI WAR IN WHICH DECATUR AND HIS MEN EXPLODED THE MYTH THAT THE FIERCE BARBARY SWORDSMEN WERE CONSIDERED BY WORLD POWERS TO BE INVINCIBLE IN HAND-TO-HAND FIGHTING. DECATUR WAS ONE OF THE YOUNG OFFICERS IN CHARGE OF 6 UNSEAWORTHY GUNBOATS AND TWO BARGES WHICH SERVED AS A SPEARHEAD ATTACK ON THE TRIPOLI HARBOR. THEY FACED THE SUPERIOR FIRE POWER OF 115 CANNON AND 9 HEAVILY-MANNED GUNBOATS WHICH HAD SET OUT WITH EVERY INTENTION OF INTERCEPTING AND BOARDING THE AMERICANS. HOWEVER, IT WAS DECATUR WHO SURPRISED THE PIRATES BY DOING THE BOARDING. THE PIRATES, CONFUSED BY DECATUR'S UNUSUAL TACTICS WERE DEFEATED.

THE AMERICANS CAPTURED 3 GUNBOATS, KILLED 47, WOUNDED 26 AND CAPTURED 49. 13 AMERICANS WERE WOUNDED. THE ONLY AMERICAN KILLED WAS LIEUT. JAMES DECATUR, THE BROTHER OF STEPHEN DECATUR.

CAPTAIN DECATUR DISTINGUISHED HIMSELF IN LEADERSHIP AND BATTLE THROUGHOUT HIS NAVY CAREER. HIS DARING EXPLOIT IN LEADING A SMALL VOLUNTEER FORCE INTO TRIPOLI HARBOR AND BURNING THE CAPTURED AMERICAN FRIGATE *PHILADELPHIA* WAS PROCLAIMED BY LORD NELSON TO BE THE OUTSTANDING FEAT OF THE AGE. FOLLOWING HIS PROMOTION TO COMMODORE AND HIS APPOINTMENT AS HEAD OF THE NAVAL COMMISSION HIS COLORFUL CAREER ENDED IN A DUEL FOUGHT WITH A FELLOW NAVAL OFFICER. HIS THOUGHT-PROVOKING SENTIMENT WITH WHICH WE ARE ALL FAMILIAR WAS "MY COUNTRY - MAY SHE EVER BE RIGHT, BUT, RIGHT OR WRONG, MY COUNTRY."

Stephen Decatur - one of the truly great Americans who guided our young Navy toward greatness: born Jan. 5, 1779 - died Mar. 22, 1820.

Performance Excellence... a Navy Tradition

ALL HANDS

NOVEMBER 1977

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Four of the U.S. Navy's active duty astronauts meet with Secretary of the Navy W. Graham Claytor, Jr. (center), during their mid-September visit to Washington. From left: CDR Robert L. Crippen, Capt. Joseph P. Kerwin, CDR Bruce McCandless, and CDR Thomas K. Mattingly, II. The astronauts also visited the Chief of Naval Operations, Vice Chief of Naval Operations, the Naval Research Laboratory and the Chief of Naval Material while in the area. (Photo by David Wilson)

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Front: The Navy's hot-air balloon at the Boy Scout Jamboree this past August. Photo by JO1 Pete Sundberg. See story on page 16.
Back: The nuclear guided missile cruiser USS *Texas (CGN 39)* underway. Photo by PH2 Thomas Baroody, Jr. See page 23.

Chief of Naval Operations: Admiral James L. Holloway III
Chief of Information: Rear Admiral David M. Cooney
Dir. Print Media Div. (NIRA): Lieutenant John Alexander
Editor: John F. Coleman
Production Editor: Lieutenant Jeff Zakem
Layout Editor: E. L. Fast
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Staff
LT Bill Ray
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Currents

SECNAV Proposes Reserve Program Change

SECNAV Proposes Reserve Program Change ● Secretary of the Navy W. Graham Claytor, Jr., has proposed to Congress that the Reserve Management Personnel System, which will integrate regular officers into reserve management assignments, be implemented as of Nov. 1, 1977. The plan calls for an orderly phase-in of regular and recalled selected reserve officers into key reserve management and policy billets during a 15-year period. As TAR officers complete normal careers, they will be replaced by these officers in the Reserve Management System. Under this plan, TAR officers currently on active duty will be able to continue with undiminished career opportunities. No involuntary releases are associated with the plan. The enlisted TAR community will continue its historic role in the Naval Reserve. Regular officers, and selected reservists recalled to active duty under the plan, will be assigned to key reserve management functions. During the transition period, both regular and TAR officers will be assigned to reserve billets. In a letter to the chairmen of the House and Senate Armed Services and Appropriations Committees, Secretary Claytor said, "I have concluded that attainment of a truly homogeneous total force that we all seek, requires the closest direct and mutual involvement, and singleness of purpose, between our regular and reserve force managers. Only in this way will we be able to achieve the desired readiness and efficiency of our reserve forces. I am determined to achieve this common objective."

Maternity Uniform For Officer and Enlisted Women ● The Navy has approved maternity uniforms for its officer and enlisted women. The uniforms were developed because Navy women wanted an attractive and practical uniform which would allow them to maintain a professional appearance while performing military duty during pregnancy. Currently, pregnant women wear civilian maternity clothing when conventional uniforms no longer fit. The anticipated cost of the versatile four-piece ensemble is under $40. The uniforms will be available for purchase in Navy exchanges or through special order outlets early in 1978. The ensemble consists of a long- or short-sleeved shirt, dark blue slacks and skirt, and dark blue overblouse, and can be mixed to form appropriate uniforms for all seasons and duty requirements. The various combinations reflect the new overall uniform styles for all Navy women approved and announced last July: service dress blue (white shirt with tie, overblouse with ribbons); winter blue (overblouse with tie and ribbons); winter working blue (overblouse without tie or ribbons); summer blue (white shirt without tie and with ribbons).

Cholera Shots Now Less Frequent ● Cholera booster shots, once required every six months for military personnel outside the U.S., are now being given to Navy people only when they will be living in a country with a cholera outbreak (as determined by the World Health Organization) or if it is required by the host country. The change is contained in a recent instruction issued by the Bureau of Medicine and Surgery (BuMedInst 6230.1H of 7 June 1977). Navy people will continue to receive the basic series of cholera shots if they are stationed outside CONUS or preparing to depart for overseas duty assignments. But they will not have to receive a booster shot every six months unless they are affected by the new guidelines.

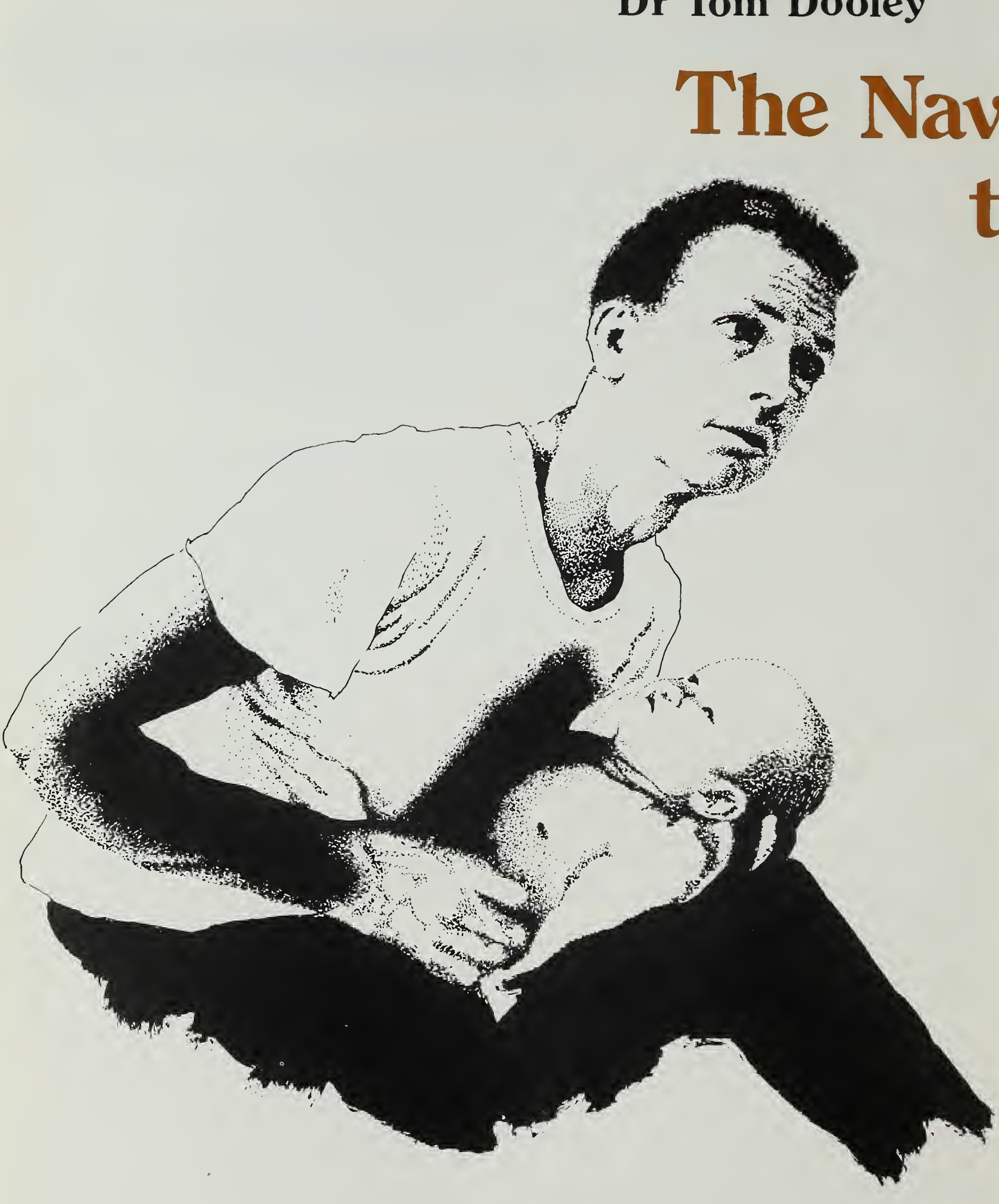
Rehabilitated Alcoholics Successful in E-7 Selections ● The 155 E-7 candidates who completed one of the Navy's Alcohol Rehabilitation Programs achieved an advancement selection rate comparable to all other E-7 candidates considered by the FY 78 CPO Selection Board. Overall, 44.2 per cent of the approximately 5,000 E-7 candidates were selected for advancement. The selection board noted a great improvement in the performance evaluations of rehabilitated alcoholics compared with evaluations received in the years immediately preceding their entry into an Alcohol Rehabilitation Program. In a letter to the Chief of Naval Personnel, the president of the selection board stated that the board's record review leaves a very favorable impression of the Alcoholism Rehabilitation Program.

Naval Institute Sponsors Three Annual Contests ● The Naval Institute's General Prize Essay Contest this year offers a top prize of $1,500, a gold medal and life membership in the Institute. The subject matter of the essay must relate to the mission of the Naval Institute: "The advancement of professional, literary and scientific knowledge in the naval and maritime services, and the advancement of the knowledge of seapower." Any person, civilian or military, is eligible to enter. Winning essays are published in *Proceedings.* Deadline is 1 Dec1977. A second contest, the Naval and Maritime Photo Contest, offers $100 to each of 10 winners. Black and white as well as color prints or slides may be entered. This contest is open to all interested photographers and the deadline is 31 Dec 1977. The Institute's third contest is the Vincent Astor Memorial Leadership Essay Contest, designed to stimulate research, thinking and writing in the broad field of leadership. The first prize winner receives $1,500, a Naval Institute Gold Medal and a life membership in the Institute. This contest is limited to commissioned officers in the Navy, Marine Corps and Coast Guard in pay grades O-1 through O-3, and officer trainees within one year of receiving their commissions. Winning essays are also published in *Proceedings;* deadline is 1 Mar 1978. Details for each contest are available by writing the Membership Services Manager, U.S. Naval Institute, Annapolis, Md. 21402. (301) 268-6110.

Guidelines Published For Veterans Educational Assistance Program ● Information is now available on the educational benefit program which replaced the G.I. Bill. Navy people who joined the service on or after 1 Jan 1977 are affected by this program. Basically, the post-Vietnam era Veterans Educational Assistance (VEA) program allows Navy men and women on active duty to plan financial aid for education while in the service or after they are discharged. They must contribute $50-75 per month for at least 12 months. The Veterans Administration then will match the service member's contribution on a $2 for $1 basis. Between the two, Navy people could have up to $8,100 (the maximum allowed) banked for education. The VEA replaces the G.I. Bill, which did not require contributions by service members, yet guaranteed comparable educarional benefits. Details are in OpNav Notice 1760 of 29 Aug 1977.

Dr Tom Dooley

The Navy tc



Sent Him
His Life's Work

"Medico" today continues the work started by Dr. Dooley.

BY JO2 DAVIDA MATTHEWS

Vietnamese refugees called him Bac Sy My—"Good American Doctor." In Laos, he was Khun Ma Farange, or "Friend Foreign Doctor."

The Navy first knew him as a hospital corpsman, then later as Lieutenant Thomas A. Dooley, III, (MC)—the jungle doctor.

Unless you've read one of his books or any of the many others written about him and his work, it's possible you know little of the man, Tom Dooley. But in Southeast Asia, literally hundreds of thousands of people not only knew him but are still benefiting from his work.

In his short lifetime—he died from cancer in 1961 at age 34—he reached out to them, touched them and helped them. And their world was a better place for his having cared.

He was born in 1927 in St. Louis, Mo.

At age 17 he entered Notre Dame as a pre-med student. Two semesters later, he asked his parents for permission to enter the Navy as a hospital corpsman. They agreed, thinking that the experience would provide the young man with an opportunity to discover whether his desire to be a doctor was real or not.

He enlisted in 1944 and was sent to Great Lakes Naval Training Station. From there, he was assigned to the U.S. Navy Hospital, St. Albans, Long Island.

By the time Dooley became head corpsman in the operating room, the Marines were experiencing a critical shortage of medics. So Tom was transferred to the Marine Corps Base at Quantico to go through training again, this time, Marine style.

After six weeks, he was transferred to the Marine Hospital in San Diego where he treated combat casualties until 1945, a few months after V-J day. At this time, he was released from the service to continue his studies as a pre-med student. He returned to Notre Dame in 1946.

By 1948, Dooley didn't have a degree but he did have enough credits to apply for entrance to the St. Louis University School of Medicine.

Dooley chafed under the rigid schedules and required class attendance imposed by the school. From all accounts, he partied his way through med school, drove a flashy red convertible with a full-size, cigar-store wooden Indian as a passenger and ended up repeating his last year.

a wooden indian was his joy-riding companion

But he finally received his M.D. degree on March 15, 1953. In April, the Navy appointed him lieutenant (jg) in the Medical Corps, and sent him to the Naval Hospital at Camp Pendleton, Calif. Later he received orders to the Naval Hospital in Yokosuka, Japan.

Destiny seemed about to catch up with Tom Dooley. From Yokosuka, he received TAD orders to USS *Montague* (AKA-98), an attack cargo ship, bound for two weeks in the Philippines to take part in amphibious operations and practice landings.

He had no inkling of what was to come. He gave the loan of his car to a friend and new civilian suit to his roommate for a one-night occasion.

When he returned to Japan 11 months later, the car had 20,000 more miles on it and the suit didn't fit anymore — he had lost 60 of his 180 pounds.

Montague was given two days' notice to take part in the evacuation of North Vietnam, the operation which came to be known as the "Passage to Freedom."

The Geneva Treaty which ended the war in Indochina after French controlled Dien Bien Phu fell to the communists, stipulated that the area north of the 17th parallel was to be communist and the area south, free. An American task force assembled to evacuate refugees south to Saigon.

A Navy chaplain aids refugees at height of "Passage to Freedom." At right: Refugees board truck during relocation.

Tom's ship was ordered to the port of Haiphong. There, they picked up 2,217 refugees for the two-day trip to Saigon. This was Dooley's first exposure to the needs of the those people. It left an indelible impression that would change the course of his life.

They were miserable, filthy, lame, blind, crippled war-weary and wounded. Later, he wrote:

"Eighty percent are very old men and women and the others are infants, all swollen with malnutrition and starvation, and literally dozens without limbs.

"All in Vietnam dream and strive for freedom; the people who toil in the rice fields with backs bent double and faces turned to the brackish mud, the naked children playing in the monsoon . . . the poor with amputated arm or hand outstretched. They have one dream. Some have achieved it. Many have not."

Dooley was changing, becoming absorbed in the lives of these ill and desperate people. The young man who had partied his way through med school was gone forever.

When the ship arrived in Saigon, he was selected to become a member of a team of three doctors and a dozen enlisted men to do preventative medicine studies and epidemiology work in Haiphong and Laos.

The station was established to help stop the tremendous amount of contagious diseases coming aboard the ships by decontaminating the refugees first. A secondary purpose for the team was to make an exhaustive study and catalog the diseases of importance in the Indochina area of the world.

Completing the collection of epidemic and other medical data, the team's other doctors left. Dooley remained in charge of a tent city whose population of 10,000 to 15,000 changed as quickly as the people could be washed, vaccinated, inoculated and screened for communicable diseases.

Although never specifically authorized to do so, Dooley began to treat them, dealing with everything from broken bones to typhoid. With the help of only four enlisted corpsmen, Dooley sometimes treated as many as 300 patients in a day.

he sometimes treated 300 people a day

He scrounged what medical supplies he could from ships in the harbor. He wrote to pharmaceutical companies back home begging for medical supplies, vitamins, soap, anything and everything which could be useful in his work.

He drove himself, pouring out his energy and ruining his health. There was so much to be done and so little time. A stipulation in the Geneva treaty specified that the escape south would end May 1955. From August 1954 until the cutoff date, the Navy assisted in relocating nearly a million refugees in the south.

Dooley stayed until the very last minute and was even held by the communists for a day and a night before he was released. He was flown to a hospital in Japan to recover his health, then returned to the States where he was awarded the Navy's Legion of Merit.

With him he brought stacks of notes and diary entries and a partially completed manuscript. Dooley felt that unless he put the story down on paper, the world would never know of these people, their struggles, their hopes.

He was ordered to the U.S. Naval Hospital, National Naval Medical Center, Bethesda, Md., for duty under instruction in residency training.

In the next few months, Dooley had to make a decision

that would affect the rest of his life. He could choose an assured future as an established doctor, or he could go back to Indochina, doing the work and helping the people who needed him most.

For Tom Dooley, there could be only one decision. The spectre of a young pregnant girl holding a child with smallpox, the blind eyes of a 4-year-old girl infected with trachoma or the other little children with their enormous swollen bellies from malnutrition — these things he couldn't forget.

So he chose Indochina and all the hardships that decision entailed. But to do this, he had to go as a civilian.

In 1956, Dr. Dooley resigned from the Navy and made plans to return to Indochina. In a 26-city speaking tour, he lectured to medical societies, sororities, high schools, colleges, grade schools, Rotary Clubs, press clubs, Chambers of Commerce and religious groups of all faiths.

He gave TV, radio and press interviews. He addressed hospital staffs and luncheon clubs. He even spoke at the Willys automobile plant in Toledo. Everywhere he went he told the story of the Passage to Freedom.

His purpose was to raise money and supplies for a small, privately-financed medical mission.

Operation Laos, as the mission was dubbed, started with donations—nickels and dimes from school children, samples from pharmaceutical companies and supplies from surgical houses.

In the midst of his planning and lecturing, his book entitled "Deliver Us from Evil" was published and soon hit the bestseller lists.

Dooley contacted three enlisted men he had served with in the Navy: Peter Kessey from Texas, Norman Baker from New Hampshire and Dennis Shepard from Oregon. He persuaded them to leave their families and commitments and accompany him to Laos.

With the support of the International Rescue Committee (IRC), they set up their first clinic in the small village of Vang Vieng. Since the IRC charter did not encompass medical programs, an amendment to the charter formed "Medico." As Dooley explained, "The simplicity of Medico's program is this: We actually believe that we can win the friendship of people only by working beside them, on equal terms, humans to humans, toward goals that they understand and seek themselves. Medico is a person-to-person, heart-to-heart program . . ."

Before Dooley was finished, he had established six more clinics in four other Asian countries, laid the groundwork for an eyebank in Hong Kong and was supporting an orphanage in Vietnam.

his nerve-call it gall-was a talent

As soon as one clinic was running, Dooley returned to the States to raise money for another.

Nerve, gall, brass—call it what you may but Dooley had it. It was a talent that served him well. He wheedled, coaxed, begged, borrowed, anything to get the things he needed. It also earned him some criticism. His critics said he was a little too flamboyant and not above self-advertising. Some considered him to be arrogant, lacking in consideration and ignorant of common courtesy.

Dooley had a purpose and not a great deal of understanding for those who did not move as fast as he did. His critics had minimal effect on his popularity with the masses who supported his work. A 1959 Gallup poll named Dooley as one of the ten "World's Most Admired Men," along with such leaders as Churchill, Eisenhower and Pope John XXIII.

In the spring of 1959, Dooley discovered a lump on his chest. It was diagnosed as malignant melanoma, one of the deadliest of cancers.

Dooley allowed his operation, which removed most of the muscles and glands behind his right breast, to be filmed as part of a documentary to educate the public about cancer. Eleven days after the operation, he was released from the hospital. After convalescing a few weeks, he went on a eight-week, 37-city speaking tour which raised nearly $1 million. To this he added the profits from his second and third books, "Edge of Tomorrow," and "The Night They Burned the Mountain."

But time was running out for "Dr. Tom." It had not been caught and soon spread to his spine, where vertebrae began to disintegrate. Every movement was agony; every breath, an effort. He made a final trip through Indochina before checking into New York Memorial Hospital.

On Jan. 18, 1961, the day after his 34th birthday, Thomas Dooley died.

But the spirit of his work lives on. After his death, friends and associates of Dooley felt that Medico was not performing under the principles on which it was founded. So, late in 1961, they formed the Thomas A. Dooley Foundation, using as their watch words "Help with dignity."

In the same tradition as Tom Dooley, it was their goal to help the local people establish their own basic care centers and to train them to operate these centers for their own people. Today, the Foundation has programs in Nepal, Laos, Cambodia, India and Vietnam. They have set up, then turned over to the people everything from hospitals, clinics and orphanages to midwifery clinics and child health care centers.

Often in his lectures, Dooley would say, "Our paltry effort isn't going to change the mortality tables of Southeast Asia, but it's a beginning. And if you light a candle in a very dark place, it shines a long way." ⚓

Dooley as a Navy medical officer.

the choice was easy

BY JOHN BRINDLEY

For Sherry K. Henderson, deciding to practice medicine at 30,000 feet in the air was the most natural choice in the world.

"There's no way I can serve under the water," she explained as she recalled the two choices the Navy offered her when coming on active duty in 1974.

"I got two brochures in the mail—one on being a submarine physician—one on being a flight surgeon; the choice was easy."

Today, Lieutenant Henderson is the third woman physician to complete a rugged six-month aerospace medicine course, including primary flight training in Pensacola, Fla., and be designated a Navy Flight Surgeon.

Currently attached to antisubmarine warfare Patrol Squadron Nineteen at Moffett Field Naval Air Station, she claims she "never has a chance to be bored."

When not in the air or practicing general medicine as it relates to the aerospace physiology of the pilots and aircrewmen who fly the turbo-prop *Orion* patrol plane, she spends her spare time relaxing at home in San Jose.

"There's no television in my house," said Dr. Henderson. A gourmet cook, she specializes in Swiss and French cuisine, which she learned while working as a governess in Switzerland before attending medical school.

Music, the doctor's minor in college, is her second love—it ranks just behind medicine. But while life is beginning to level off a bit for this single naval officer, she admits that her career has not always been a smooth flight.

In 1972, as a senior medical student at the University of Utah—with her government grant running slim—the young woman had to look elsewhere for financial support. "I heard some of my classmates talking about the various military programs," she explained. "I talked to them and I found that the Navy had a senior medical student program. I joined up."

After finishing up her first year residency training in

Salt Lake City, she was accepted for flight surgeon training and came on active duty.

"At that stage of the game, I had no idea that only two other females had gone through the flight surgeon program," she said. " I just assumed it was something standard for females."

She received instruction in the T-34 trainer. Excellent academically as well, Dr. Henderson was the first woman flight surgeon to receive the Surgeon General's Award for all-round performance. The four-month clinical portion of the training, in which she was the only female, was mostly devoted to aviation physiology; cardiology; ear, nose and throat; opthalmology and neuropsychiatry. There also was some dermatology and orthopedics.

As in her work today, the emphasis is in aerospace physiology, specifically as it relates to what goes on in a person's body when up in the air.

"I had to go through swimming practice for a couple of months before I finished all the phases of swimming. If it hadn't been for the support of my classmates, I don't know how I would have ever passed the swimming portion of it."

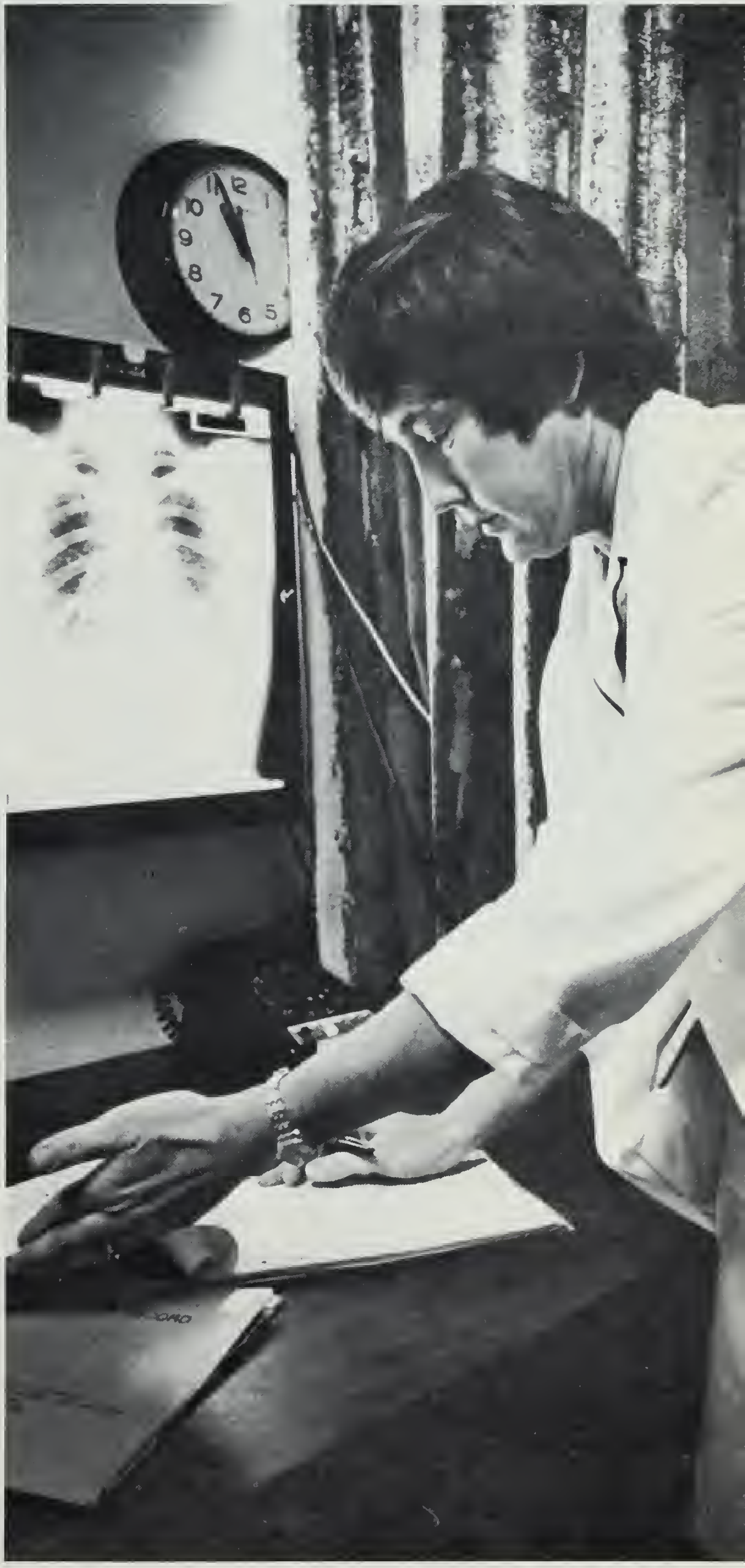
She added, "The land survival was easy—all I did was fish. I was the only female with 250 males which was kind of interesting; I fished until midnight so there was plenty for everybody the next morning."

One aspect of being a Navy doctor found to be particularly rewarding has been the exposure to different types of illnesses which one normally wouldn't encounter as a civilian doctor. Before coming to Moffett Field in August of 1976, she spent 18 months on Okinawa.

Dr. Henderson recently extended her active duty. She cited the staggering cost of malpractice insurance, a good salary, the opportunity to travel and meet people, and enough time off to enjoy life as the reasons.

"If I got locked into a private practice, the times when I would be able to travel—as I do now as part of my Navy job—would be few and far between," she explained.

"I'm planning to pursue a family practice residency in the Navy for the next three years," she concluded. "I definitely plan to do more solo flying . . . I suppose there's always the fantasy of setting up a practice in a rural community and flying around making house calls." ⚓



JAMBOREE

BY JO1 ANDY TURNER
PHOTOS BY JO1 P. SUNDBERG

Perhaps you saw one of your shipmates at "More Rain" in Pennsylvania this past August—or you might have seen him on the "Mudway."

Actually, the real names are Moraine State Park (north of Pittsburgh, Pa.) and the "Mudway" is really the Merit Badge Midway. Thirty thousand Boy Scouts, attending the 1977 National Jamboree, dubbed the park and the midway with new names following a drenching thunderstorm on the third day of festivities in early August. Pleasant weather, however, prevailed for most of the weeklong activities.

The scouts and their adult leaders came from every state in the union and 100 foreign countries. And the Navy was well represented, not only by scoutmasters from places like Kingsville, Tex., and Charleston, S.C., but by other groups—including two Navy bands; electronics, signalling and oceanography booths on the Merit Badge Midway; and a Navy parachute team.

The Navy's newest aviation demonstration team from Naval Weapons Evaluation Facility at Kirtland Air Force Base, Albuquerque, N.M., also was there. They fly a 50- by 60-foot high ripstop nylon, hot-air balloon complete with wicker gondola.

"A lot of people don't realize how much the Navy supports scouting," commented Electronics Technician 1st Class Larry E. Earle, a Jamboree Scout Master who is assigned to Naval Air Station, Kingsville, Tex. "As long as a man can be spared from his command, he can get no-cost orders for the jamboree."

Earle is also scoutmaster of the troop sponsored by his command, and finds that cooperation among individuals is also excellent. "Just about everything I need in the way of expertise is available at my command. It helps me to provide an interesting and well-rounded program."

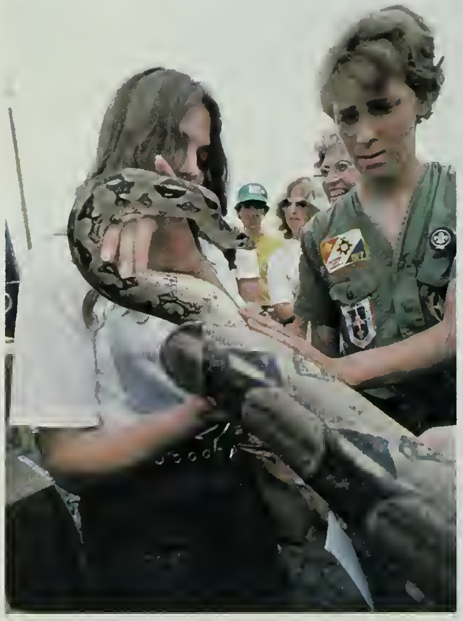
Electronics Technician Senior Chief (Submarine) Frank Young carried the Navy/Scouting relationship even farther. A submarine veteran from Charleston, S.C., his troop sported a model of a *Polaris* submarine at the gateway to the campsite.

"The *Polaris* sub is sort of a symbol for Charleston," commented Young. "Also, most of the boys in this troop are Navy-oriented, so it was only natural."

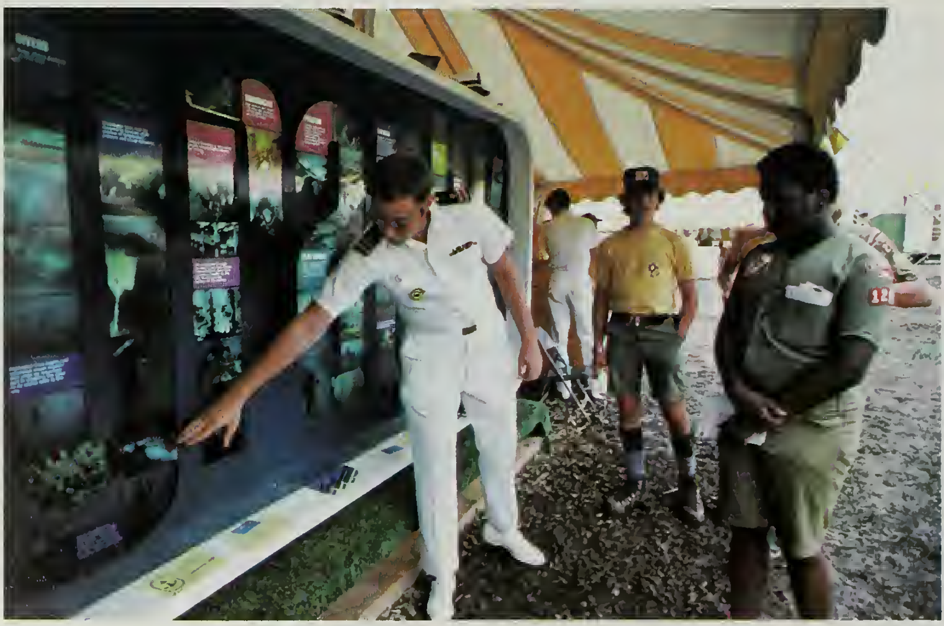
The jamboree started on an up-beat note, with beautiful weather blessing the site as the scouts crowded into the outdoor amphitheater for the opening ceremonies to the tune of the Navy country-bluegrass band "Country Current."

British Army Lt. Gen. R.S.S. Baden-Powell could be forgiven if he wasn't aware—in 1908—that his book "Scouting for Boys" would have great impact on the boys of the world. All he hoped to accomplish was that his book would be used by existing boys' organizations in England such as the Boys' Brigade. His book, however, started the worldwide organization now known as the Boy Scouts.

No doubt Baden-Powell's ghost had a ball this past August at Moraine State Park. Anyway, it's a certainty that 30,000 scouts shared an opportunity of a lifetime, despite the rain.



SPANISH PEAKS
SCOUT RANCH
SANTA FE TRAIL COUNCIL
KANSAS
SANTA FE TRAIL
WAGON WHEEL
KANSAS



WHE

EVER THE WINDS GO

There was no doubt that Boy Scouts were all over the place at Moraine State Park this past August. And all you had to do was look up in the sky to see that the Navy also was there. The Navy's 50- by 60-foot, nylon hot-air balloon stuck out like an Alaskan brown.bear at a church picnic.

Taking part in the 1977 National Jamboree was the detachment from the Naval Weapons Evaluation Facility at Albuquerque's (N.M.) Kirtland Air Force Base, the group which operates and maintains the Navy balloon.

This nylon balloon, complete with its rattan gondola, was specially designed for use by the Navy Recruiting Command as an inexpensive, but effective way of attracting interest in the naval service. The balloon is tethered to the ground and displayed at fairs, outings, and, most recently, at the 12th Balloon Federations of America's national hot-air balloon championships at Indianola, Iowa.

The sports world has taken to ballooning with a passion in recent years, to the point that the younger generation may think it's a brand new adventure. Actually, ballooning goes back almost 200 years—since 1783 when Jean Pilatre de Rozier achieved man's first sustained flight. With the development of the modern hot-air balloon equipped with a ripstop nylon envelope and propane burners, ballooning has achieved a certain efficiency—albeit that the winds still dictate the direction and speed of flight. Ballooning, it seems, is still the simplest method of flying.

Three volunteer Navy crews, each consisting of two pilots and a crew chief, operate the balloon on a rotating basis. Since the balloon is an aircraft, it's subject to all Federal Aviation Agency (FAA) regulations and the pilots are certified and licensed as commercial balloon pilots by the FAA.

The balloon, when requested for an event, is normally flown by airplane from Albuquerque to an airport nearest the display site and then hauled by truck to the exhibit site.

Preparing for flight, the crew spreads the envelope on the ground and attaches the gondola. Using a gasoline-powered fan aimed into the mouth of the envelope, cold air is blown into it, inflating it enough for a crewman to enter and inspect the interior structure. If everything checks out, hot air (propane) burners take over and complete inflation.

Everything depends on the outside air temperature. On a cold day, the interior envelope temperature could vary from 180-210 degrees Fahrenheit. On a warm day it could take up to 250° to sustain buoyancy. Exceeding 275° is dangerous—at 300°, the envelope will melt.

Balloon flight is relatively simple. It ascends, of course, by using the hot air from the propane burners and descends by releasing the air through a vent. Horizontal movement, however, is entirely different and the pilot never knows what his destination will be. His course is determined by the winds that carry him.

Although a team pilot has ascended to 12,000 feet in the Navy balloon, it rarely leaves the ground, but instead, is used as a tethered display, a billboard that states, "Navy—an adventure." *Photos by JO1 P. Sundberg* ⚓

Information Exchange

Q. *What is the Board for Correction of Naval Records (BCNR) and what exactly does it do?*

A. BCNR is composed of high-ranking civilian employees of the various bureaus and offices of the Navy Department and from Headquarters Marine Corps. BCNR can be petitioned for the correction of any naval record in order to correct an error or to remove an injustice. Cases reviewed include requests for corrective action involving the removal of officer fitness reports, removal of enlisted evaluations, review of unfavorable discharges, review of physical disability retirements, review of nonjudicial punishment, crediting of constructive service, entitlements to reenlistment bonuses, corrections to dates of rank, etc. Upon review of all the documentary evidence of record pertaining to the alleged error or injustice, the Board may deny an application without a hearing, recommend relief without a hearing or set the case for a hearing. Hearings are based upon documented evidence and the burden of proof rests with the applicant. Applications for correction of naval records under the provisions of Title 10, U.S. Code, Section 1552 (DD Form 149) may be obtained by writing the Board for Correction of Naval Records, Department of the Navy, Washington, D. C. 20370. See BuPersMan, 5040200, for further information.

Q. *How are LANTFLT deployment schedules determined? Why, for example, do carriers spend so long in the Med?*

A. Scheduling decisions are made on the basis of many factors. Scheduled yard and overhaul periods, material condition, manning and unexpected repairs are some. In addition, the United States has made various multi-lateral and bi-lateral agreements with other countries to maintain certain numbers of ships at various locations at all times, or to provide for various exercises.

Further complicating the scheduling decision is the fact that the number of ships available has declined since the decision was made to retire older ships. New ships are now joining the fleet faster than the old ones are decommissioned, but the levels are much lower than they were ten years ago.

In the case of extended deployments, the CNO has set a goal of six months portal-to-portal (six months between the time a ship leaves its home port until it returns). LANTFLT schedulers do all they can to meet this goal. For example, the average deployment time for amphibious ships scheduled for the near future is just about the six-month goal. The longest deployment anticipated for all types during that period is about 6.8 months.

Q. *I have a service-connected disability and qualify for the 10-point civil service employment preference. May my wife also get such preference for civil service employment?*

A. No. However, if the veteran cannot be appointed to a civil service job due to his disability, the wife can be entitled to the 10-point preference. You and your wife cannot, at the same time, receive the preference.

Q. *I've filled out home town news release forms in the past, but there was never a story in my hometown paper. Why not?*

A. Each year, 78 to 90 per cent of the more than 1.5 million releases sent out by Fleet Home Town News Center are used by local newspapers and radio stations. There are several possibilities why some are not used. Your command may have failed to process the form correctly or submitted the basic news release too late for use. In addition, although subscribing newspapers normally try to use everything provided by all the service Home Town News Centers, space restrictions may dictate they shorten or drop such things as community news— which includes the FHTNC releases.

Q. *Why is it taking so long to process Fleet Reserve applications?*

A. BuPers Manual, 3855180.8, requires that "Application for Transfer to Fleet Reserve," NavPers 1830/1, be submitted a minimum of six months and a maximum of twelve months prior to requested Fleet Reserve date. Applications are initially processed within Pers-5 by Pers-5221. Following this processing, applications are forwarded to Pers-38 for computation of service and issue of "Fleet Reserve Transfer Authorization," NavPers 1830/2. Requests are processed on a case-by-case basis and the normal processing time is two to three months. Depending on prior service background, eligibility factors, and availability of service record, some cases may take in excess of three months. However, approximately 90 per cent of all applications are processed within three months. The remaining 10 per cent require additional time to verify prior service or clarify eligibility status. Response time should be further shortened as BuPers completes the microfilming of all enlisted service records, scheduled for completion in the near future.

Q. *I am moving to Canada. Can I use my VA guaranteed home loan there?*

A. No. Real property must be located in the United States, its territories or possessions to qualify for the VA loan guaranty.

The View From One Aircraft Carrier. . .

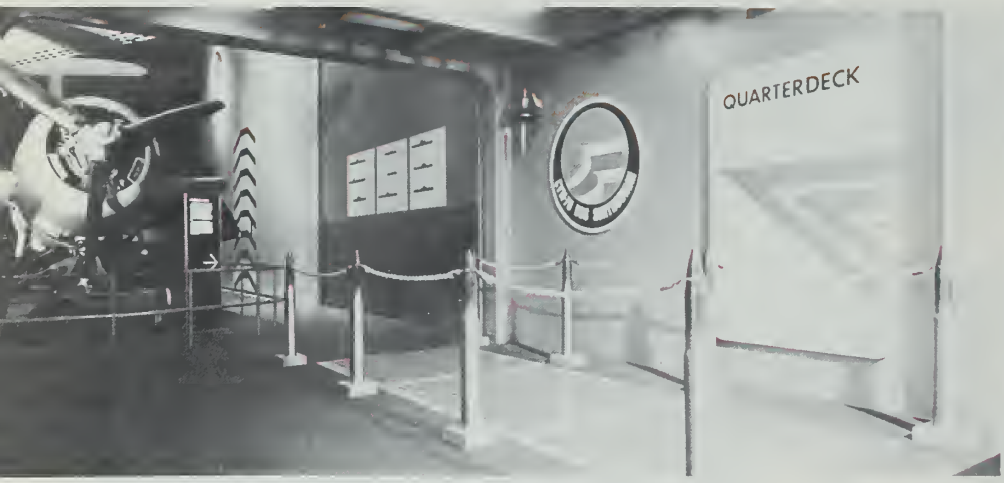
The little boy clutched the hangar deckedge rail and stared out at the rolling ocean. All three feet of him unconsciously braced, then relaxed—in keeping with the rising and falling horizon.

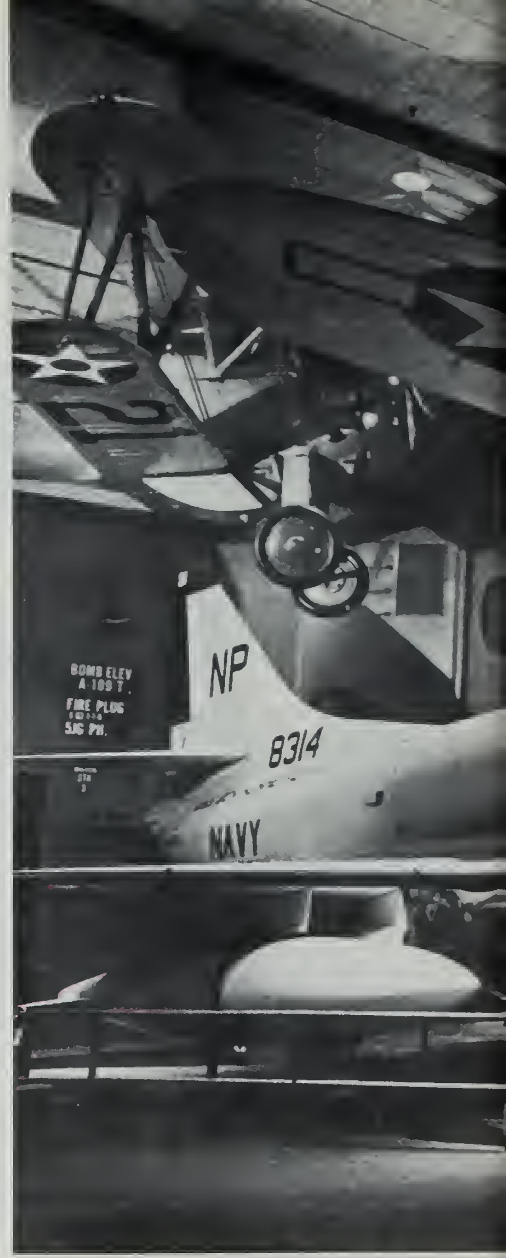
In Primary Flight Control, a teenaged couple held hands and looked over the Air Boss's shoulder at the frenzy of activity on the flight deck below.

Below decks, an elderly man in a wheelchair sat in the squadron ready room and patiently explained the reason for the red, night-vision lights to his wife.

These people—and many more—were caught up in the excitement and adventure associated with a U.S. Navy aircraft carrier steaming at high speed while conducting high-tempo flight operations.

. . .Minus Salt Spray





But there is more to this than that which meets the eye. Much more.

You see this aircraft carrier has never been underway. Nor are there any sailors assigned to the ship. And while the hangar deck is packed with aircraft, they are planes representing more than 40 years of Navy and Marine Corps aviation.

There have been more than 10 million visitors to this aircraft carrier since she was commissioned. But many of those visitors have never walked a real carrier's decks and perhaps a few have yet to see the ocean.

In spite of this, the consensus is that the best way a landlocked visitor to Washington, D.C., can learn of such things as aircraft carriers and the sea is aboard the "USS *Smithsonian* (CVM 76).

Her name and hull designation (the "M" stands for museum) are clues that the visitor is actually on the second *floor* of the National Air and Space Museum and not on the "non-skid" hangar deck of an aircraft carrier far out at sea. But there are precious few other clues because museum officials set out to duplicate, as realistically as possible, an aircraft carrier and the job she accomplishes.

They have succeeded. The guide book calls it, "Gallery 203—Sea-Air Operations," but the visitor who crosses the faithfully reproduced quarterdeck (to the sound of the bosun's pipe) enters an aircraft carrier's world possessed of almost everything but salt spray and stack gas.

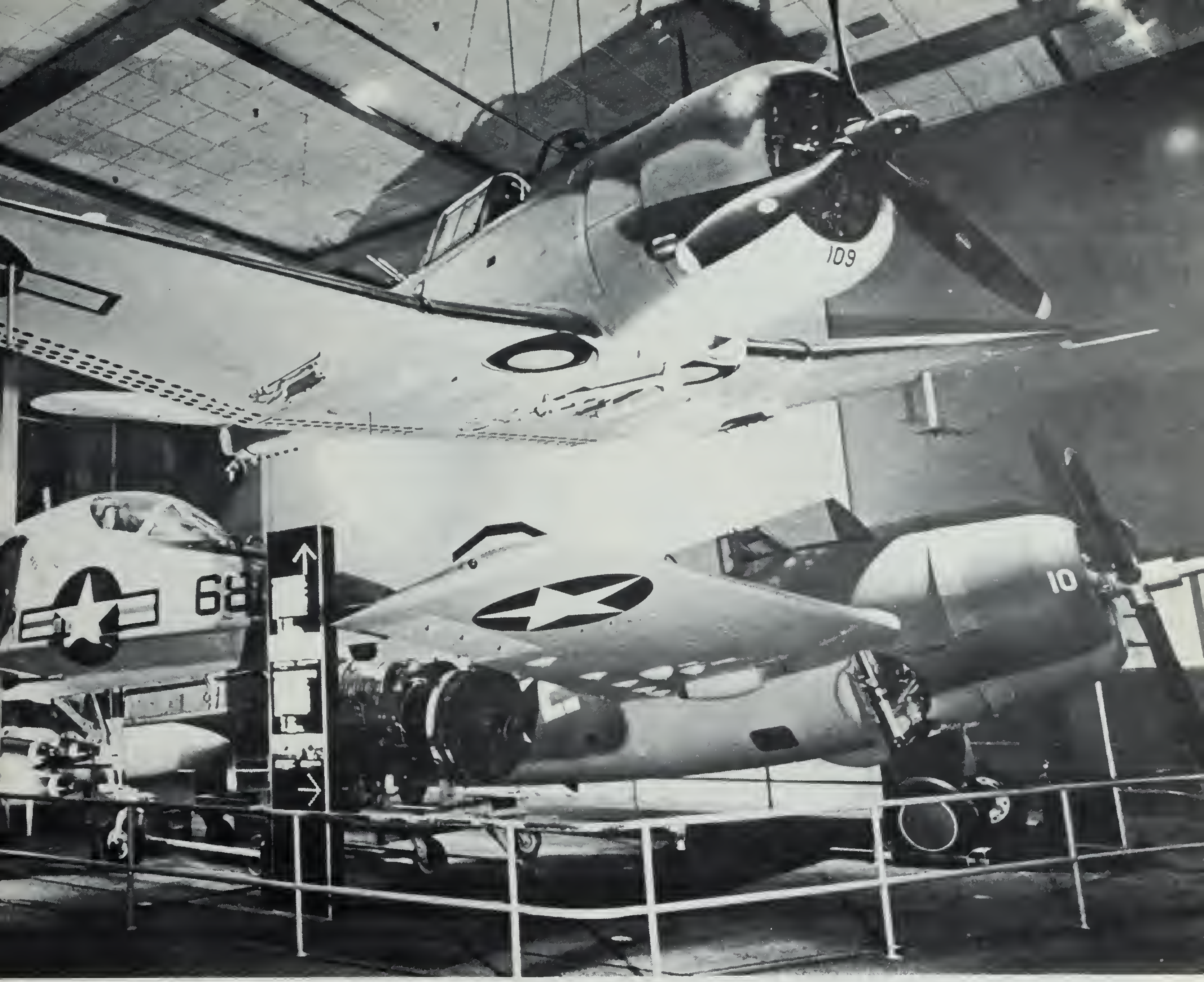
This attention to detail—from the same non-skid surface used on carrier decks to exact duplicates of hangar deck fire doors, passageways and stations—might tempt the seasoned carrier sailor to start thinking it's time to relieve the watch.

That same sailor might also find himself looking out the glass of Pri-Fly and, thanks to a rear-projection movie of flight operations on a real carrier photographed from the same perspective, he may critically search for safety violations on the busy flight deck.

But if the sights found aboard an aircraft carrier are important to realism, so too are the sounds. From the moment the visitor is piped aboard, the sounds of an aircraft carrier operating at sea continue. Looking at the hangar deck with the sea beyond (also provided by rear-projection movies) one hears the sounds of wave action and spray being tossed by the carrier's stern. Up in Pri-Fly and Air Ops, one can eavesdrop on conversations between pilots and air controllers.

Exhibits off the museum's hangar deck area trace the history of flight over water, recreate the Battle of Midway, demonstrate how the Fresnel Lens landing system works aboard aircraft carriers and much more.

The National Air and Space Museum opened during the Bicentennial year; it's a national center for the collection, preservation

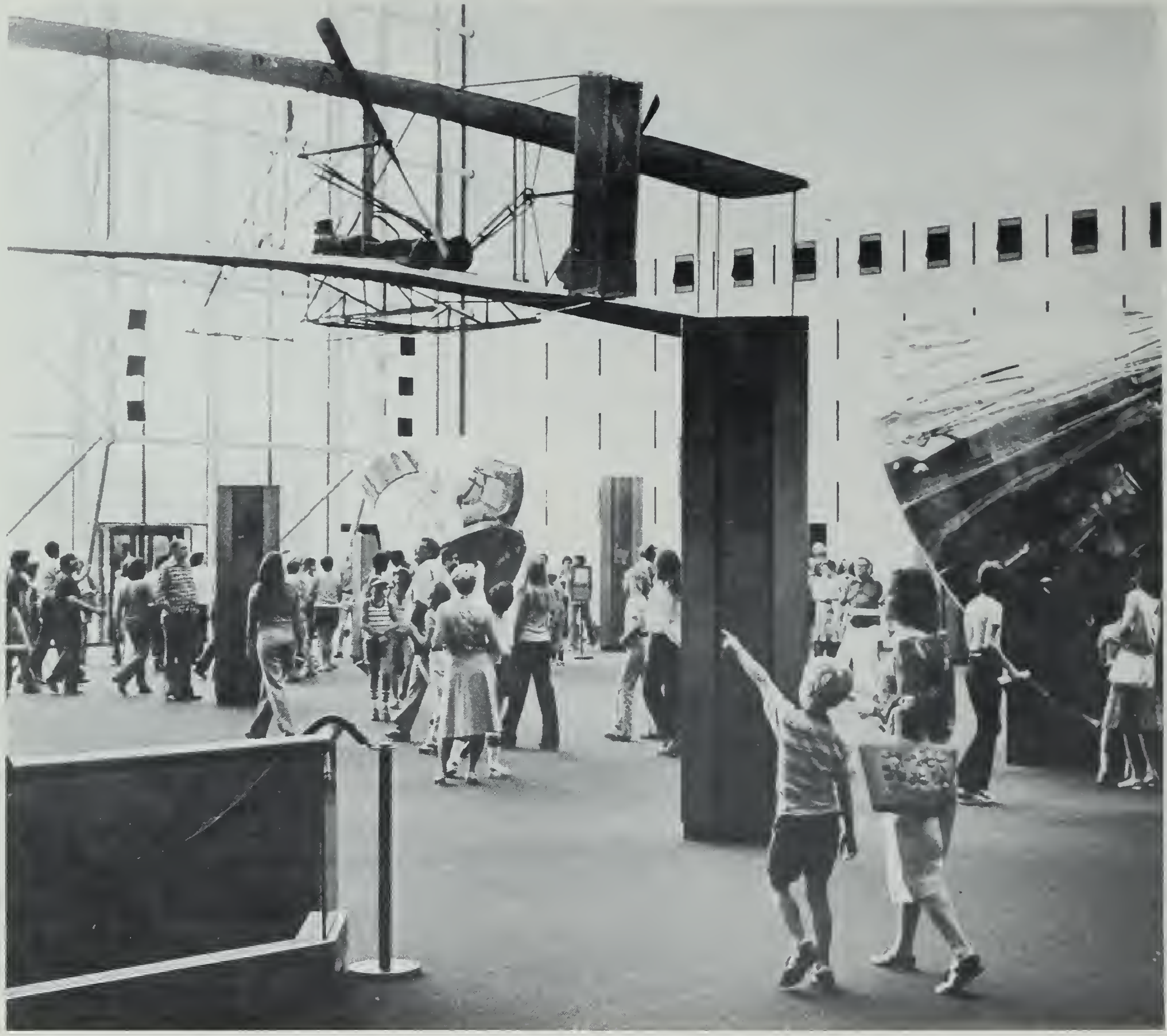


and study of the history of flight. Since Navymen and aircraft have figured so prominently in America's history of flight, you will see Navy aviation contributions (from the first Navy plane to fly the Atlantic—the NC-4—to the space capsule that bore an all-Navy crew) throughout the museum. But Gallery 203 is where it all comes together.

Don't be surprised as you cross the hangar deck and find your "sea-legs" returning and your ear cocked toward the 1MC. That's supposed to happen when you're on an aircraft carrier at sea.

STORY BY JO1 JERRY ATCHISON
PHOTOS BY PH1 TERRY MITCHELL

And Stack Gas. .



The National Air and Space Museum is located in Washington, D.C., on Independence Ave., between 4th and 7th Streets, S.W. The museum is open every day except Christmas. Its hours, from April 1 to Labor Day, are 1000 to 2100. On all other dates it is open from 1000 to 1730. Like all galleries and museums which make up the Smithsonian Institution, there is no admission charge.

. . .Equals the Smithsonian

WHEN IT COMES TO TEXAS:
they do it BIG

"Texas! The very name stirs emotions and feelings whenever it is said or heard. To those of us who come from the State, the name has traditionally symbolized the biggest and the best."

These were the proud words of Texas Congressman George H. Mahon at the September 10 commissioning of USS *Texas* (CGN 39), the latest of the nuclear-powered *Virginia*-class guided missile cruisers.

As if to emphasize the Congressman's words, adding "most generous" and "most hospitable" to the list of superlatives, 2,400 yellow roses were donated for commissioning decorations by a Texas nursery; plankowner medallions (individually engraved) were presented to each crew member; Texas cookbooks were given to each crewman; 1,200 pounds of beef were donated by Texas beef producers for commissioning parties; chili—the Texas State dish—was made and donated by the reigning international chili champion, Albert Agnor, of Marshall, Tex.; Texas beers were donated by the breweries; a "Taste of Texas" reception featuring Texas beef, shrimp, turkey, ham, fruit and vegetables—all donated by Texas producers—was prepared by the Texas Agriculture Department; the Battleship *Texas* Commission transferred three pieces of silver from the historic battleship museum to the new *Texas* and presented a section of teak planking from the quarterdeck of the battleship; oil paintings by Texas artists were displayed in various spaces of the newly-commissioned ship; 20 calculators were donated to the ship by citizens of Texas; and each crew member was given a digital watch by the citizens of Texas—that's 473 watches!

The fifth ship to bear the name of Texas, this nuclear-powered cruiser itself embodies several superlatives of its own. To accommodate a crew of 28 officers and 445 enlisted men and to accomplish her mission of antiaircraft and antisubmarine warfare of the first-line striking force, *Texas* is 585 feet long with a beam of 63 feet. She has a full-load displacement of 11,000 tons.

The new USS Texas *(CGN 39)—Photo by PH2 Chuck Cole*

Her propulsion system consists of two nuclear fission reactors which power a set of geared turbines and twin screws to propel the ship in excess of 30 knots. It will be after at least 10 years of "normal" ship operation before she needs refueling.

Texas' potent punch is "a first-of-its-kind" fully integrated combat system making use of the latest technology in computers, weapons systems, sensors and command and control techniques. Her firepower consists of two multipurpose missile launchers for antisubmarine (ASROC) or antiaircraft (*Tartar D*) missiles, two lightweight 5"/54 guns, 2 three-tube torpedo launchers and a helicopter.

Captain Peter B. Fiedler, *Texas'* first commanding officer, is a 1954 graduate of the United States Naval Academy. He has a master's degree in physics from the Naval Postgraduate School. Commander Nicholas C. Paleologos, the executive officer, is a 1960 graduate of the University of Maryland with a bachelor's degree in electrical engineering.

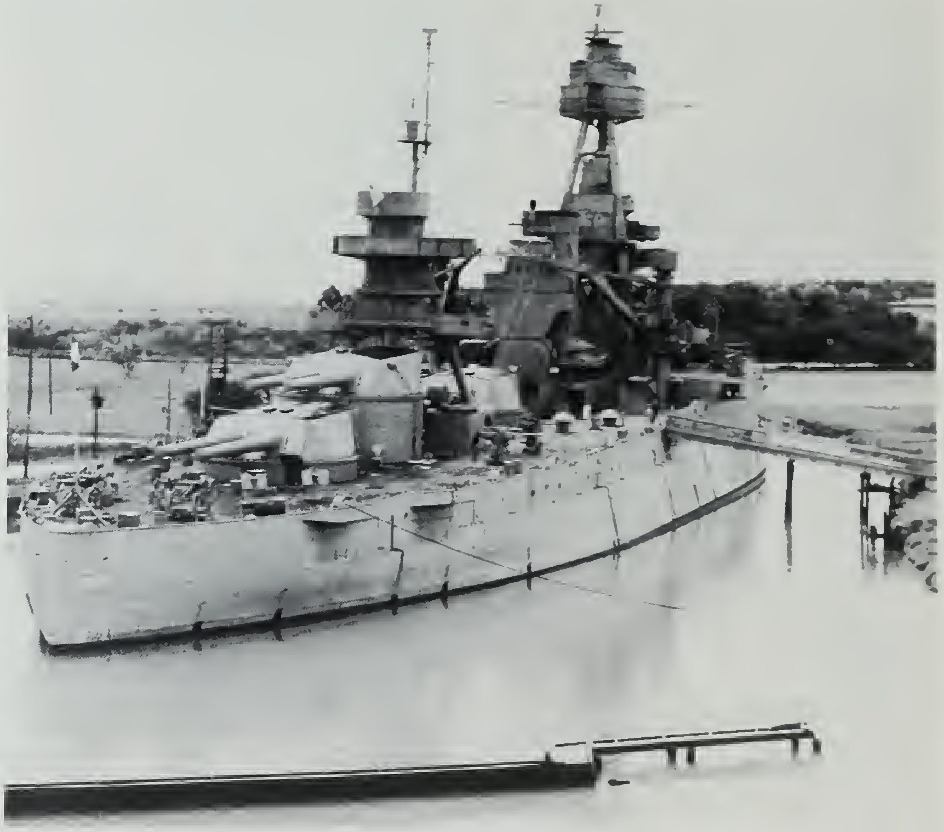
The first ship named *Texas* was a sloop of war in the Republic of Texas Navy, commissioned in 1840. Her name was later changed to *Austin* and she was transferred to the U.S. Navy.

The second ship was a Confederate twin-screw ironclad ram. She was seized by Union forces in 1865 and taken to Norfolk Navy Yard.

The third ship was the U.S. Navy's first battleship. Launched in 1889, she saw action in the Spanish-American War. In 1911, she was decommissioned and renamed.

The fourth ship named *Texas* was another battleship. Commissioned in 1914, she served in European waters during World War I. In the Second World War she took part in both the European and Pacific theatres, participating in the invasions of Normandy and Southern France and later, the landings on Iwo Jima and Okinawa. After the war, *Texas* was decommissioned and today she is enshrined at San Jacinto Battlegrounds in Texas.

In summing up the naval heritage of ships named *Texas,* Congressman Mahon concluded, "Let it be the fervent prayer of each of us that the new USS *Texas* will never have to fight against an enemy, but that if the time of trial does come, that the *Texas* will be as brave and gallant as her predecessors."



The World War II USS Texas, *now a memorial at San Jacinto, Tex.*

USS Texas Museum

BY CHAPLAIN M. TERRY HALL

No visit to Houston is complete without a visit to the USS *Texas* Battleship Museum at the San Jacinto Battlegrounds monument. A tribute to the ships that once ruled the seas, she has long since become dated, but the memories of that bygone era live on within her.

One can sense a certain air of majesty about her; can even visualize the furious oceans she once battled with the salt spray drenching her fo'c'sle. As the imagined storm subsides, one can almost hear the call, "Now secure from Storm Condition One."

Thousands of sailors crossed her afterbrow during her years of service. "Request permission to come aboard, sir," exclaim countless voices from the past.

Walking on her main deck one sees an array of weapons. They are long since obsolete, but it was with these guns that *Texas* helped defeat the enemy in two world wars. Just as a woman exhibits her diamonds and other jewelry, so this "lady" shows off her most precious gems—her big guns—to thousands of tourists.

The now deserted fantail calls to mind the many divine services held there in the past. "Divine services are now being held on the fantail," the 1 MC would announce. Men journeyed from their bunks and up ladders to that one place—on this ship—where man met God in the act of divine worship. For some, this place of worship was the place where lives were spiritually refreshed in times of peril.

This gallant ship now rests in peace, yet she still lives. Though retired for many years, she fascinates thousands of visitors every year, including this chaplain. She will always be a symbol of those men "who go down to the sea in ships," and of the peace that the United States of America continues to enjoy.

New Ships

The past few weeks have been good for the U.S. Navy: one ship recommissioned, three commissioned, and two christenings.

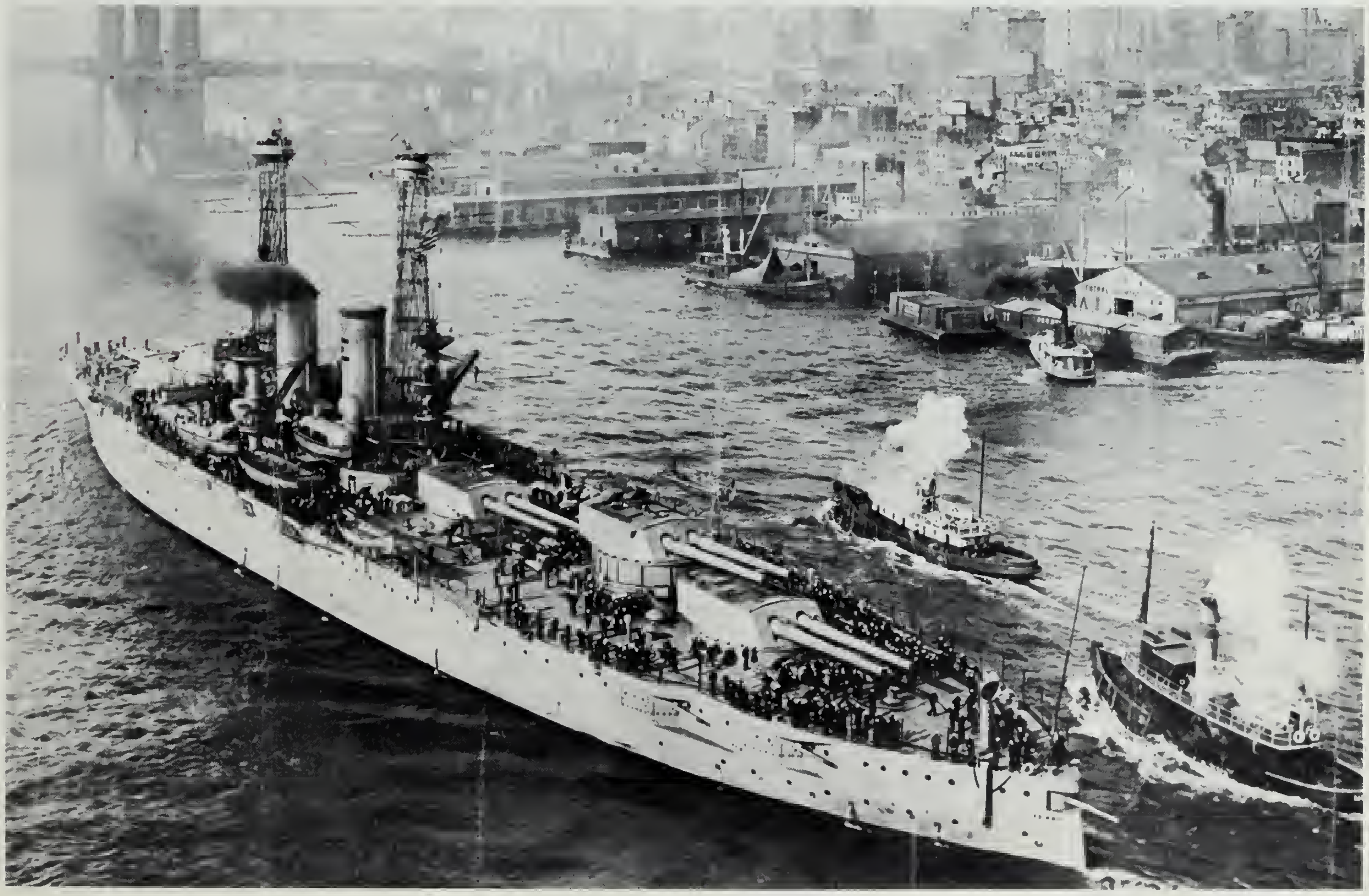
It all began with the recommissioning of the guided missile destroyer USS *King* (DDG 41) at the Portsmouth Naval Shipyard, Va. *King* was one of the first ships to be equipped with the Naval Tactical Data System (NTDS), a high-speed digital computer complex.

The commissionings included that of the spanking new nuclear-powered aircraft carrier USS *Dwight D. Eisenhower* (CVN 69) at the Naval Station, Norfolk, Va. on October 18. *Eisenhower,* third nuclear carrier and the second of the *Nimitz* class, has an overall length of 1,092 feet, and a beam of 292 feet.

At Pascagoula, Miss., the destroyer USS *Caron* (DD 970) and the amphibious assault ship USS *Saipan* (LHA 2) were commissioned and the destroyer USS *John Hancock* (DD 981) was christened. *Caron* and *Hancock* are gas turbine-powered *Spruance*-class destroyers whose primary mission is anti-submarine warfare. *Saipan,* the second of five in a new class of amphibious assault ships, is 820 feet long at the flight deck, 20 stories high overall and is second in size only to a modern-day aircraft carrier.

The Navy's newest nuclear-powered fast attack submarine, USS *Birmingham* (SSN 695) was launched at Newport News, Va. *Birmingham* is the latest *Los Angeles*-class submarine. ⚓

USS Texas *(BB 35) in New York City harbor, about 1916.*



PG School—It's

BY LT LARRY BACON

The Naval Postgraduate School at Monterey, Calif., has the look of a typical small college campus. There is a mixture of both old and new buildings, beautifully landscaped grounds, and students strolling from class to class.

Naval officers pursuing graduate degrees there, however, say that the atmosphere is unlike that of any civilian colleges they attended as undergraduates.

The students look different too. They don't wear uniforms to class, but the casual attire and longish hair prevalent at most civilian college campuses are absent. Those who come to the Postgraduate School are older than most college students and most are married.

But the primary difference is that NPS's students are more interested in their studies than in fraternity parties, football games and even the homecoming queen.

"Everyone here seems to be more serious about his academic work," said Lieutenant Robert Freedman, a 27-year-old naval aviator. "It's interesting and it's all meat and potatoes."

LT Freedman, who is enrolled in the school's aeronautical engineering program, said he enjoys his studies because he can readily see how they will be useful to him in his career. He appreciates not being burdened with academic requirements outside his field of interest.

The Postgraduate School currently has about 1,000 students pursuing studies in about 25 curricular programs reflecting a variety of naval, technical, scientific and administrative interests. Most of the students are U.S. Navy junior officers. However, there are also officers from other U.S. military services, allied forces, as well as federal government civilians. Students normally attend NPS for one to two years—and nearly all earn a master's degree.

NPS has a reputation for being academically tough—a well-deserved reputation. Students generally agree that they are asked to absorb more information in less time at NPS than was expected of them at the civilian universities where they did undergraduate work.

Some, though, complain about the lack of time to spend with their wives and families. "It's like being deployed at home," said Lieutenant Commander L. E. "Tex" Curran, an operations research student. He said he is expected to learn so much in so little time that "it's like trying to drink from a fire hose."

Lieutenant John Caske, an aeroengineering student, said that those who come to NPS should be prepared for the strain. "It's rough academically and domestically as well," he said. "I think it's important that your whole family knows what you're getting into. It's going to be a strain on everybody involved."

Most students have to make it a point to budget their time to allow for family life. One student, Lieutenant Terry Magee, said he manages to play basketball every day, spend time with his family and still maintain a 3.88 grade point average. Magee, a naval aviator, said he had to work harder during his undergraduate days at State University in New York, but "I was married then, too, going to school and working 40 hours each week," he said.

Living conditions at Monterey are good.

Most students and their families live in Navy housing close to the campus. The NPS community has its own highly rated elementary school and there are plenty of recreational and social activities for wives and dependents. Many of the wives attend nearby civilian colleges while their husbands are at NPS or they find jobs in the community.

Students usually rate the instruction received at the school as "tops." They say that members of the teaching staff —most are civilian and have often worked on military projects—offer good ideas on how to apply the concepts being taught to specific military situations.

Many students at the school said they have learned much from interaction in and out of the classrooms with other students who offer fresh perspectives on a variety of concepts. Some officers said they wished their curricula could be stretched out over a longer period of time, however, so they could spend more time absorbing instruction and perhaps delve into related academic areas. "One extra quarter would make a world of difference for me," said one student.

Another, though, disagreed saying it

all 'meat and potatoes'

would be impractical. To stretch the curriculum, he thought, would cost the Navy too much money and cause student officers to spend too much time out of their normal career pattern.

In spite of academic pressure, the rate of failure is low. About 95 per cent of those who come to the school leave with a master's degree—earning one requires a grade point average of at least 3.0 and completion of an acceptable thesis.

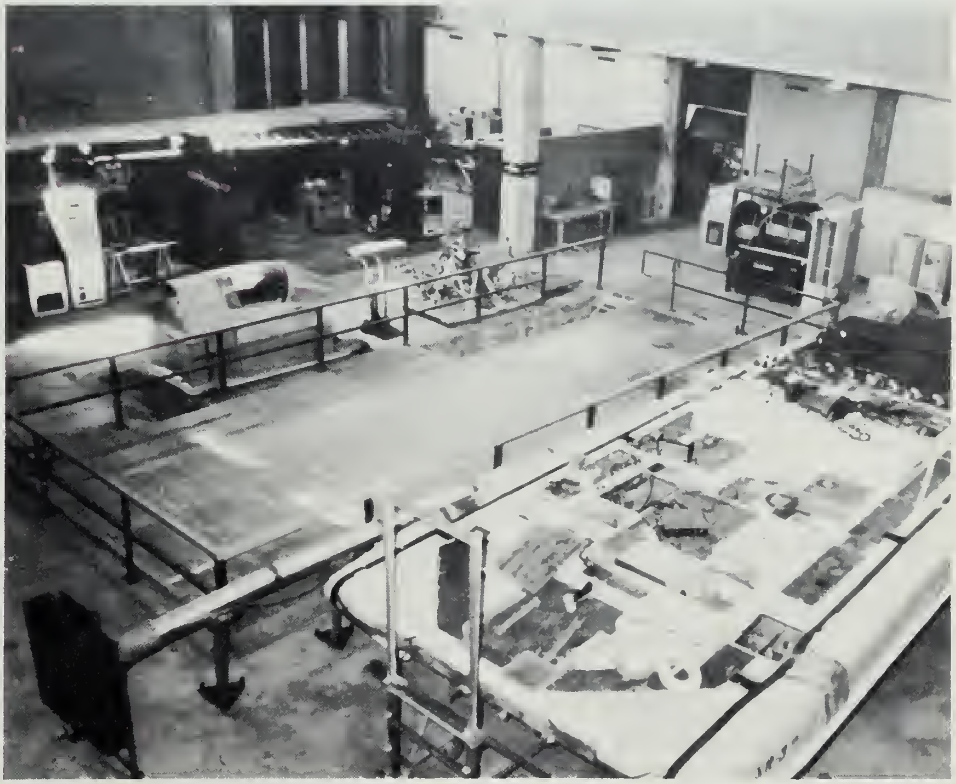
The quality of students is kept high through a screening process which ensures that potential students have the aptitude and background to cope with the academic work. Classes are small enough so that instructors can give extra help to those having difficulties.

Prospective students lacking the required mathematical or technical background may make up their deficiency through NPS's continuing off-campus education program, or they can gain needed credits on campus through the engineering science program.

Worries about interrupted career patterns are unfounded, according to Captain J. M. Barron, Naval Postgraduate School Director of Programs. He said, "DoD policy is that all NPS graduates will go to a utilization tour within two tours of graduation. Accordingly, BuPers detailing procedures reflect this policy in the assignment of subspecialists."

CAPT Barron also said, "As for promotion, the statistics speak for themselves. They show that officers with graduate educations fare better with promotion boards at all levels. This isn't surprising.

"The first criterion for NPS admission is a good operational record. You would expect these officers to succeed. And with a graduate education, more interesting and challenging assignments, greater responsibilities and opportunities are available."



Bearings

'Send in the Clowns'

Childish screams of laughter and delight fill the air when Price, as "Clem," a loveable, clumsy, awkward clown who does everything wrong and Cumpston as "Harlequin," the traveling minstrel and magician begin their antics.

All the world loves a clown, especially kids, and the guided missile cruiser USS *Josephus Daniels* (DLG 27) has five of them to give to the world.

Fire Control Technician 3rd Class Edward R. Price, Jr., became the first of the *Josephus Daniels'* clowns in 1975. Shortly after putting his act together, he learned that Signalman Seaman Dale Lee Cumpston, with background in pantomime, and Gunner's Mate Seaman Kim W. Powell, a former rodeo clown, had joined the crew. The three put together a show employing their various talents.

Seaman Lyndon Dorsey and Seaman Apprentice William I. Pontius, Jr., became intrigued with the ship's clowns and joined the group early last year.

Powell's "Koolaid," loud, bold and brightly dressed, soon joins the confusion. He is a modern, self-righteous clod who takes himself seriously, but appears foolish to his audience.

Pontius "Big Ears," a happy, shy, easily frightened, skittish clown, was born during a performance when the children responded to a large set of borrowed clown ears with happy screams of "Look at the big ears! Look at the big ears!"

"Lyn Dy," Dorsey's character, is a quiet, loveable type who extends a friendly hand to the children, approaching them on a more personal level with sweets and balloon animals.

The *Joseph Daniels'* clowns have played to childrens' audiences as small as six and as large at 5,000 in children's hospitals, orphanages and schools in the United States, Greece, Turkey, France, Italy and Spain.

Veterans of over 100 shows, the group accepts only laughter as their payment, buying their own costumes, props and makeup.

Their versatility is best projected in their development of special performances for the deaf and the blind. They have developed pantomime and other acts for those who can't hear the funny lines and they have perfected an ability to express vivid and humorous images in the minds of those who cannot see.

The world of children, says Dorsey, is "my favorite world." It is a joyous, happy place in which the *Josephus Daniels'* clowns provide moments of laughter and memories of happiness to children in every port of call.

By LCDR Bob Heintzelman

Deception Plus

Super Rapid-Bloom Offboard Chaff (Super RBOC), a larger and more effective ship-launched missile-decoy system, has been approved for service use by the Chief of Naval Operations.

Super RBOC, a simple and inexpensive way to protect ships against radar-guided missiles, is a deck-mounted, mortar-type system which dispenses a cloud of metallic-coated fiber chaff to present a false target to incoming missiles.

This new system, presently being installed on USS *Virginia* (CGN 38), consists of either two or four, six-round launchers which were designed to accommodate other types of decoy rounds now being developed.

Super RBOC is tentatively scheduled for installation on USS *Reeves* (CG 24), USS *William H. Standley* (CG 32), USS *Farragut* (DDG 37) and ships currently under construction.

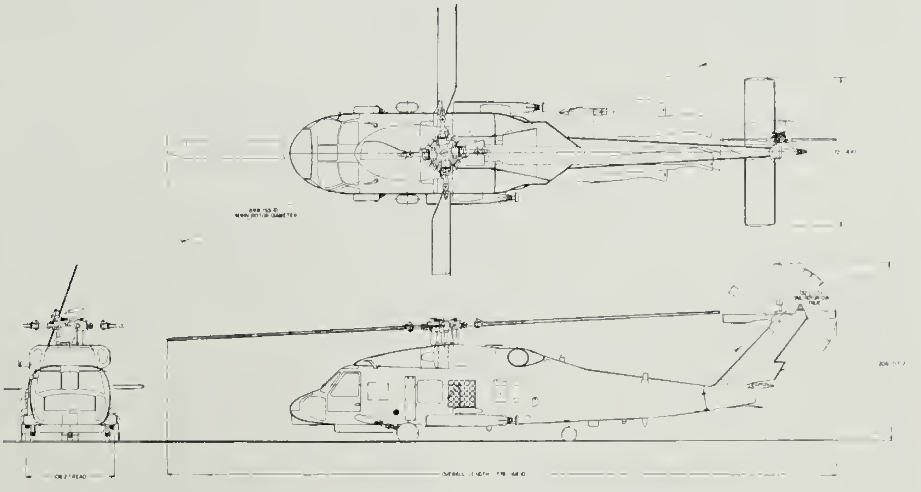
Second Generation

On September 1, the Navy announced that Sikorsky Aircraft Division of United Technologies Corp. had been chosen to build the airframe for the LAMPS MK III helicopter. At the same time General Electric Company was chosen to provide the engine for the aircraft.

The Federal Systems Division of IBM had previously been chosen to integrate the mission avionics into the aircraft and to act as the system's prime contractor.

LAMPS (Light Airborne Multi-Purpose System) was first introduced in 1971, when an existing helicopter—the UH-2C *Sea Sprite*—was converted to an anti-submarine warfare aircraft by adding a sonobuoy monitoring capability, a magnetic anomaly detection

LAMPS MK III AIR VEHICLE
THREE-VIEW DIMENSIONAL DRAWING



system, radar and other mission equipment. The aircraft was redesignated the SH–2D. The fleet currently flies the updated SH–2F version.

Since that time, the six fleet squadrons and two training squadrons have proven that LAMPS is a viable concept, broadly expanding the ASW, surveillance and targeting capabilities of the Navy's cruisers, destroyers and frigates in which it has been embarked. LAMPS MK I has become an integral part of our surface Navy.

LAMPS MK III has been designed to take advantage of the increasing capabilities of our surface fleet and incorporates the latest in aircraft, engine and electronic technology. The LAMPS system not only includes the aircraft, but new shipboard electronic equipment, and a Recovery, Assist, Secure and Traversing (RAST) system. This newest Navy helicopter will be an outgrowth of the Army's Utility Tactical Transport Aircraft System (UTTAS), also being built by the Sikorsky company. The Navy will benefit from extensive flight tests and engineering already gone into the UTTAS aircraft, the US–60A.

Over 200 LAMPS MK III aircraft are planned, with the first aircraft scheduled to reach the fleet in 1984. The new LAMPS system will undergo exhaustive technical and operational testing after the prototype aircraft are delivered in 1979/1980. The LAMPS MK III will provide a great improvement in the ASW and Anti-Ship Surveillance and Targeting (ASST) capabilities of the host ship.

With the latest acoustic processing, radar, electronic surveillance measures and equipment, the LAMPS MK III ship and aircraft team will provide a formidable capability in the fleet to face the growing seaborne threat to the free world.

By CDR R.L. Johnson

Desert Fox Honored

The Federal Republic of Germany's guided missile destroyer *Rommel* (D 187), on a four-month cruise from her homeport of Kiel, spent several days in Norfolk for crew training and liberty recently.

Built at Bath Iron Works in Maine, the modified *Charles F. Adams*-class DDG is named for Field Marshall Erwin Rommel, the "Desert Fox" of World War II fame.

Rommel, armed with Tartar missiles, two five-inch guns, ASROC and conventional torpedoes, is one of the three guided missile destroyers in the German fleet. The fleet is made up of destroyers, frigates and patrol-type ships, assisted by submarines.

Besides attending CIC operations and equipment maintenance classes at the Fleet Training Center in Norfolk, the ship's 20 officers and 320 enlisted men later visited Baltimore for liberty and participated in aircraft tracking operations off the Virginia Capes. This was expected to be followed by weapons training at Guantanamo Bay before returning to Kiel in December.

The new guided missile destroyer joined the fleet of the Federal Republic of Germany in May 1970.

'Snowbird' Watching

S3A "Viking" crewmen are among the many who watch "Canadian Snowbirds" put on a precision flying display during Canadian Armed Forces Day 77 held at the Canadian Forces Base Comox, Lazo, B.C. The North Island-based "Viking," along with an F-14 "Tomcat" from Miramar, an EA-6B "Prowler" from Whidbey Island, and a P-3 "Orion" from Barbers Point, participated in the July celebration.

Attitude Pays Off

What a way to go—

In her first attempt at the Operational Propulsion Plant Examination (OPPE), the San Diego-based guided missile cruiser USS *Fox* (CG 33) recently received an overall finding of satisfactory. No mean achievement.

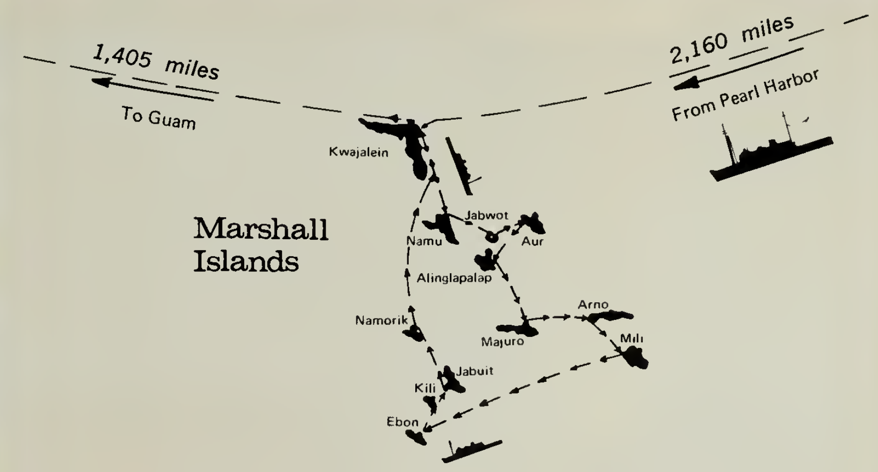
The Engineering Department successfully completed a full power run, achieved flexibility tests on all four boilers, presented three fully qualified underway watch sections and demonstrated the required proficiency and professional knowledge for sustained propulsion plant operations.

According to a Pacific Fleet Propulsion Examining Board member, "The command involvement and crew attitude and determination was most evident during the examination."

Hopping Bolster

Salvage ship USS *Bolster* (ARS 38) did some late summer island hopping in the Western Pacific. Laying over briefly in Kwajalein to place three tows in temporary mooring before delivering them to Guam and the Philippines, *Bolster* continued hopping through the Marshall Islands (see map) delivering Operation Handclasp materials as she went.

While visiting Majuro, Kili, Arno and Alinglapalap, to name a few, her crew repaired equipment for local residents, traded goods and explored the remnants of Japanese World War II installations. After retrieving her tows, *Bolster*, a unit of Service Squadron Five, homeported in Pearl Harbor, HI, proceeded westward to join the Seventh Fleet.



—A voyage of over 6,000 miles—

La Buena Vida

(the good life)

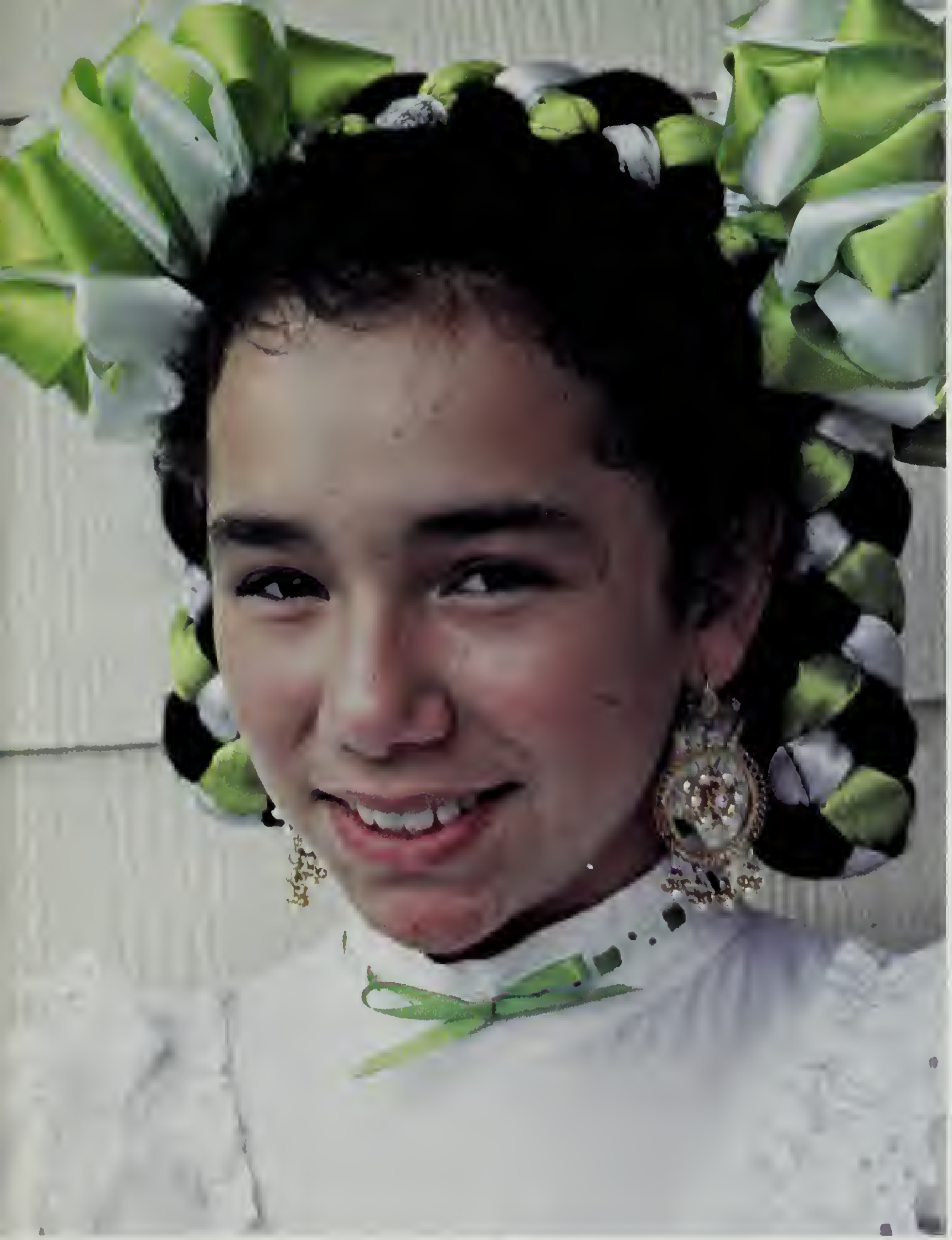
BY JO1 JERRY ATCHISON
AND JO2 DAN WHEELER

The United States understands the ethnic diversity and individuality of her people; it is the source of much of this country's strength. Considering that the U.S. Navy merely reflects American society, it's no wonder that Navy units around the world recently joined—with gusto—in celebration of one source of that diversity.

In proclaiming National Hispanic Heritage Week at Naval Supply Center Oakland, Calif., for instance, Rear Admiral H. C. Donley said, "For more than two centuries men and women of Hispanic origin have contributed their talents and energies to the development of our nation. To acknowledge these contributions, the nation set aside a week (September 11–17) to focus attention on the achievements and aspirations of our Spanish-speaking citizens . . ."

The admiral also stated that the week provided an opportunity for all to remind themselves of the many Hispanics who have served and are serving the nation with honor and distinction, including those in the U.S. Navy.

There are more than 14,000 Hispanics in the U.S. Navy. They trace their roots to Spain, Mexico, Puerto Rico, Cuba and a host of other Spanish-speaking countries. Many Spanish speaking people used the occasion of National Hispanic



Heritage Week to re-acquaint themselves with their pasts. But of greater importance, the week was an opportunity for non-Hispanic Navy people to learn of their shipmates' customs and ancient homelands.

Consider that while almost every unit in the Navy conducted some form of Hispanic Week commemoration, these events were as varied as the commands at which they were held and as diverse as the people they served to spotlight.

Here, then, is a sampling of that celebration:

PUERTO RICAN AMERICANS
The Meaning of Migration to the Mainland
JOSEPH P. FITZPATRICK
The Chicanos
A HISTORY OF MEXICAN AMERICANS
Voices of Aztlan
Edited by Dorothy E. Harth and Lewis M. Baldwin

> **"When my folks came from Mexico, they brought a lot of the old country ways of doing things."**

- At Naval Air Station Alameda, Calif., a seaman sat in the base library reading one of a score of books on Hispanics. He had selected the book from a display illustrating the depth and breadth of English-language Hispanic literature available at most Navy libraries around the world.

"When my folks came from Mexico, they brought a lot of the old country ways of doing things," he said. "But I never really understood the reason or source of many of these traditions until now."

For this sailor, National Hispanic Heritage Week was more than tacos and burritos in the galley for the noon meal. It was more, too, for the men of the frigate USS *Fanning* (FF 1076).

- In the middle of a drydock period at Hunter's Point, Calif., *Fanning's* 250 officers and men put together a celebration worthy of a major command. When the sailors gathered in the lounge of their temporary ashore home, the ship's public affairs officer, Ensign C. B. Divis, spoke above the sound of native Nicaraguan music.

> *"I've learned that the most important thing in the Navy is teamwork."*

"About 10 per cent of our crew are Hispanic," Ens. Divis said, "and they make a heck of a contribution to Fanning. It's important and valuable to the crew to learn something about the cultures of a sizable part of our crew."

The entertainment group, through music and dance, told the captivated audience of Nicaraguan courtship, marriage, life and death. The international language of music had sailors laughing at the stumbling advances of a bungling suitor, tapping their feet to the beat of Nicaraguan sidewalk vendor songs, and clapping for more.

- At Recruit Training Command, San Diego, Machinist's Mate 1st Class

Roberto P. Rodriguez, a recruit company commander, talked with some of his recruits of Hispanic origin about opportunities in the Navy for minorities.

"There are two types of minorities in the Navy. The ones who use the fact of their ethnic minority as an excuse ('I'm a Chicano so I won't get the breaks the others will') and the ones who see a job and do it. The latter are the successful guys in the Navy," he said.

The recruits were asked if they feared a loss of ethnic identity because they are required to dress, act and work the same way as their fellow sailors. The question promoted a flurry of heated responses, such as—

"I may have been in the Navy only eight weeks," said one, "but I've learned that the most important thing is teamwork and you don't lose your individuality by being a good member of a team."

- Perhaps one of the most ambitious commemorations of the week took place at the Oakland Naval Supply Center where a week-long series of concerts, lectures, dances and exhibits portrayed many aspects of Hispanic life.

Herold Martinez, a civilian employe, explained, "Active command support and enthusiastic volunteers working on the planning committee are the reason why we have been able to do so much."

NSC sailors and civilians were treated to a week of Flamenco dancers, lectures on Chicano art, and Hispanic community development. Also included were displays of arts and artifacts of various Hispanic communities, Native American jewelry and crafts, and the traditional costumes of many peoples. Events were held in two shifts during the lunch hour and also in the evenings.

"The week was an opportunity for non-Hispanic Navy people to learn of their shipmates' customs and ancient homelands."

- At NTC, Orlando (Fla.) a small celebration to increase Hispanic Heritage awareness called attention to contributions made daily by active duty Navy people of Mexican, Puerto Rican, Cuban and Latin American backgrounds. NTC sailors were treated to Hispanic food at the enlisted dining facility through the week and had an opportunity to view films at the Enlisted Club on Hispanic heritage and contributions to the American way of life.
- In Washington the celebration actually began in late July—it consisted of a week-long festival (initiated in 1970 by local residents) to recognize the contributions of Hispanic Americans. The summer celebration, attended by many service people, highlighted Hispanic customs and traditions along with cultural activities such as film and music festivals, special stage presentations, Hispanic crafts displays and sales, and a semi-formal Hispanic-American Week Ball.

July activities prepared local Navy people for DoD festivities which coincided with Hispanic Heritage Week in September. Navy people sampled Hispanic food at local dining facilities—a representative ethnic meal was prepared each day. Some of the meals were especially memorable since they came complete, as a package, with Hispanic entertainment—Latin folk singers and strolling Mariachis.

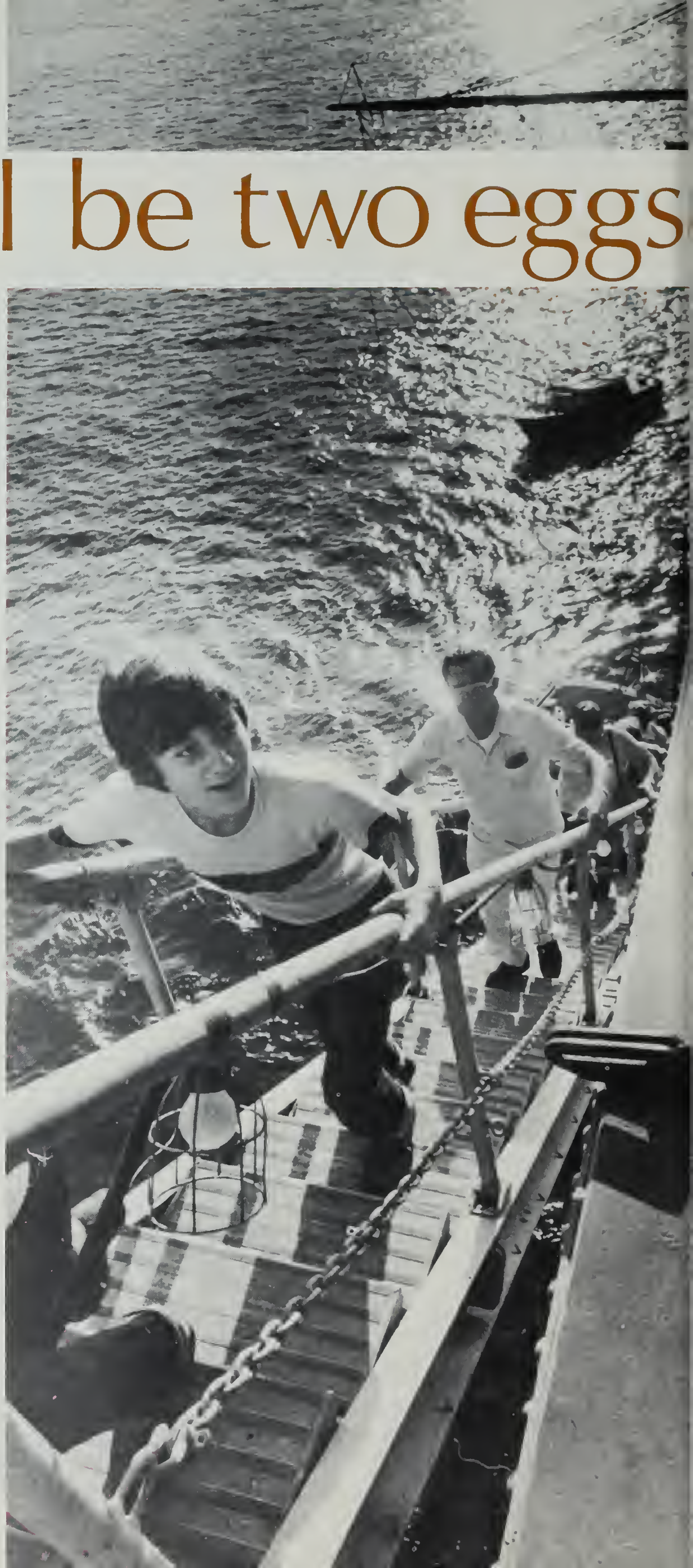
"Some meals were especially memorable since they came complete with Hispanic entertainment."

The hub of activities in the D.C. area was the Pentagon, where throughout the week films, bands, displays and speakers were featured on the concourse. One of the speakers was Assistant Secretary of the Navy (Manpower, Reserve Affairs and Logistics) Edward Hidalgo who spoke about Hispanic military contributions to the United States. Assistant Secretary Hidalgo is the first Hispanic American to be appointed to such a high ranking post in the Department of Defense.

- The Navy in New Orleans had a small, but widely visible, celebration. Signs around the Naval Support Activity announced the arrival of Hispanic Heritage Week. South American travel posters (obtained from local consulates) advertised not only the traditions of Hispanic countries, but also the times and places that "Los Doce Magnificos" would play. Los Doce Magnificos—The Magnificent Twelve—is a band made up of elements of the U.S. Navy Band New Orleans. In recognition of Hispanic Heritage Week, it played an assortment of Hispanic songs at various locations around the base and was well-received by all who attended.
- At NAS New Orleans, a celebration featured a special meal at the galley to which dependents were invited—of the 150 fed, 50 were dependent guests. The meal, of course, was Hispanic and the plan of the day, including the menu, was printed in both Spanish and English. Additionally, there were special themes highlighting Hispanic contributions.

Be it Oakland, San Diego, Hunter's Point or Washington, Navy men and women got an up-close and personal look at the world of Hispanic Americans and, in the process, received just a sampling of *la buena vida*—or, the good life. ⚓

`That'll be two eggs



STORY AND PHOTOS BY JO1 RICK MILLER

The invitation was as surprising as it was exciting. On receipt, one man turned his restaurant over to his employees. Another rescheduled his vacation in order to participate.

The kids on the list had no problems—it was summer vacation.

In all, a group of 27 men and boys did whatever necessary to participate in what one described as, "The dream of a lifetime."

****

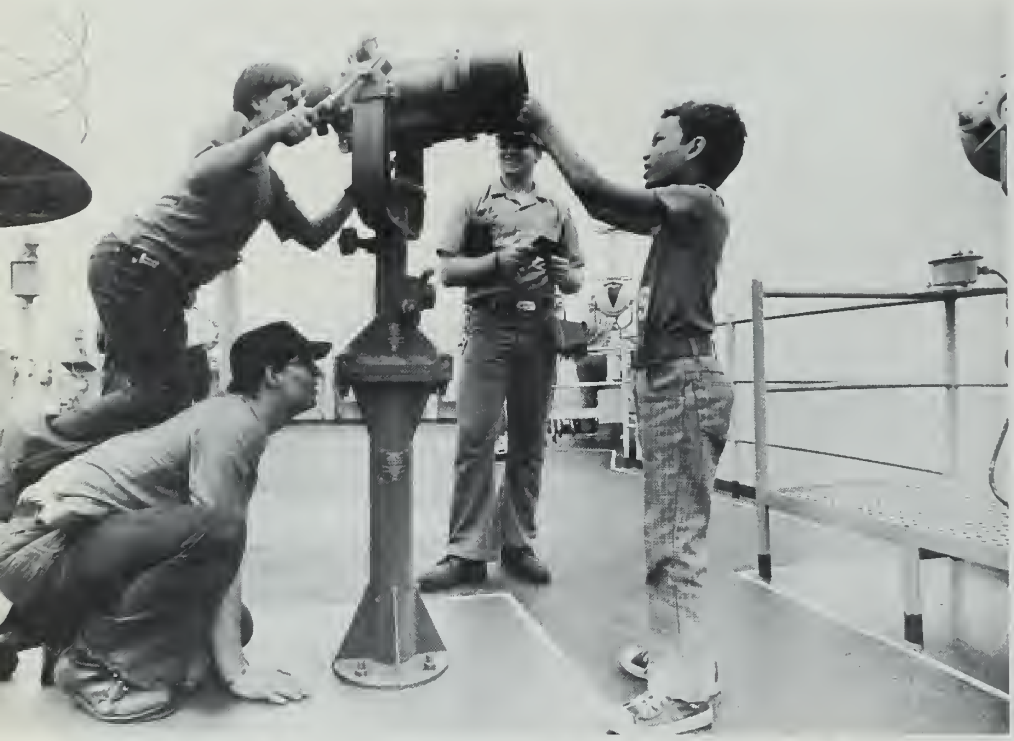
As the group gathered for an early breakfast in a Malaga, Spain, hotel, their animated talk and sense of anticipation belied the fact of an overnight flight from New York City and the hectic pace of catching taxis and buses.

But fatigue was forgotten. This early morning breakfast marked the real beginning of a two-week adventure few civilians have ever experienced. You see, members of this group were all relatives of crewmen aboard the ammunition ship USS *Mount Baker* (AE 34). And they all were about to embark on a cruise that would span four days of liberty in Malaga and ten days transit back to the United States.

A motor whaleboat from *Mount Baker* arrived at the pier. Following a flurry of baggage and passenger loading, the *Mount Baker* sailors guided the boat past the breakwater. On the other side, the group finally caught their first glimpse of the ship and their home for two weeks.

over easy... Dad.'

The dream of a lifetime



"I was really surprised to receive an invitation to come aboard a Navy ship," said William Rawling, father of Seaman Bill Rawling, Jr. "I didn't think the Navy ever did anything like that and the friends I talked to couldn't believe it either."

Indeed, the Navy doesn't conduct a father/son cruise of this scope very often. But in the case of *Mount Baker,* months of planning and special permission from the Chief of Naval Operations combined for an experience few would forget.

Commander Raymond B. Wellborn, *Mount Baker's* commanding officer told why the officers and men worked to put this extended cruise together:

the timing was perfect

"The timing was perfect, the kids were out of school, we were scheduled to be in an excellent liberty port and we were going home shortly thereafter."

With the idea heartily endorsed by the crew, planning for the event went ahead: "My executive officer and department heads went through a lot of pains and spent a lot of hours making the arrangements. We wanted to make sure our guests would be properly berthed, fed and that their safety was looked after.

"Even though some crewmen didn't

get the opportunity to bring members of their family along. I sensed a general lifting of morale among the rest the crew when the guests came aboard."

Those first four days were a whirlwind of family reunions and liberty trips in the Malaga area. There were trips to the bullfights ("I'm glad I went but it's something I particularly wouldn't care to see again," said James Carey, father of Ensign James C. Carey, Jr., of Brooklyn, N.Y.), trips to the beaches and bargain hunting jaunts to the clusters of small shops.

But fathers, brothers and sons were anxious to get a taste of life at sea. Besides, to the West lay home and a much bigger reunion with family and friends.

Mount Baker weighed anchor and steamed from Malaga. Her guests began a few days of adjustment under way that prompted 12-year-old Michael Gormley, brother of GMG3 David Gormley, to observe, "The Navy is pretty good. But I just don't think I want to join.

"I get sick sometimes."

As the cruise progressed, the visiting men and boys became a part of the crew. They ate with the crew, slept in the same compartments and even got the chance to take part in shipboard routine.

Rodney Downey, a medical technician from Star Lake, N.Y., found himself a home in *Mount Baker's* sickbay—not as a patient.

"The chief hospital corpsman gave me a complete tour of the medical spaces. If I showed the least little bit of interest, crewmen were more than happy to explain their jobs and how everything worked."

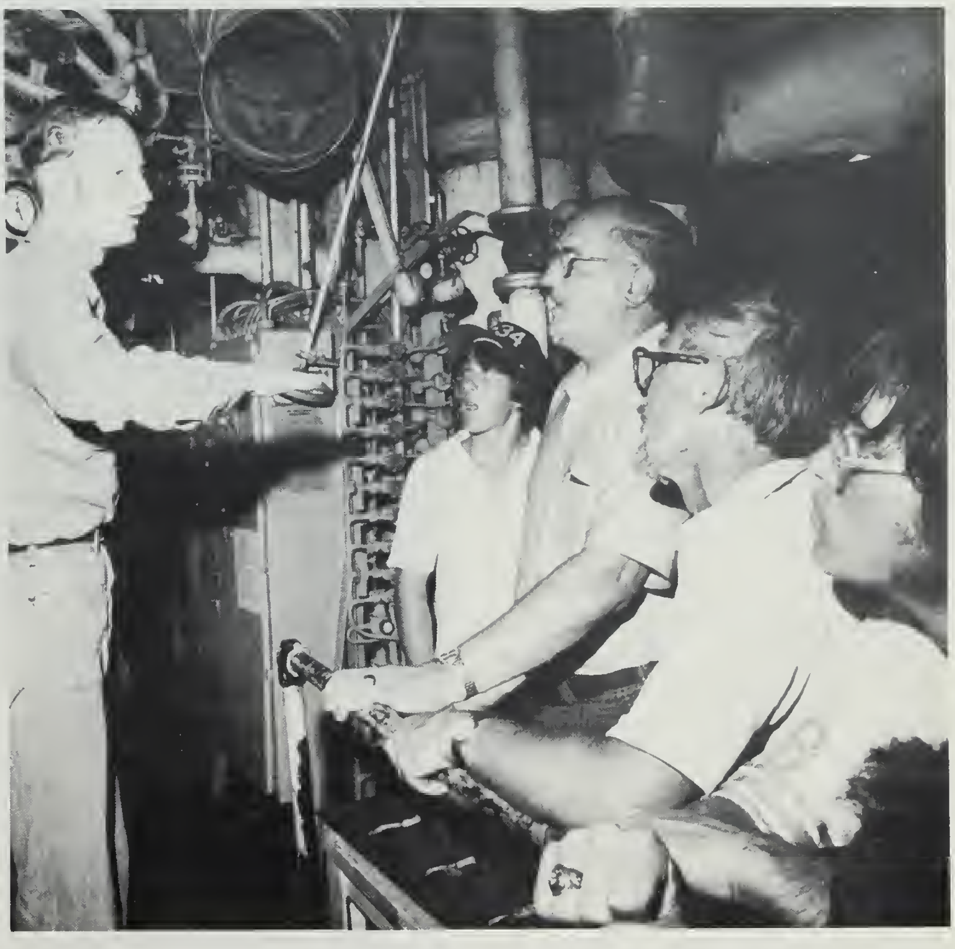
The same thing happened in the crew's mess.

Pete Burrell, the restaurant owner of earlier mention—from Saluda River, S.C.—was quite comfortable working side-by-side with his son, MSSN Cecil Burrell, in preparing meals for the crew.

Mr. Burrell's experience and seasoned palate (he was often munching on one thing or another) prompted him to rate *Mount Baker's* food as *outstanding*!

Another father took his barbering skills and shears down to *Mount Baker's* barber shop and thereby learned the tricks of cutting hair on a rolling deck.

Though many enjoyed testing their civilian skills aboard ship, the skills employed and unique tasks assigned a modern U.S. Navy ship prompted the greatest interest. The group explored



the ship from stem to stern.

"There was very little off-limits to us," said James F. Millican, who came all the way from Portland, Ore., for the at-sea period. "I was on the bridge and signal bridge any time of the day or night and I was totally welcome. In fact, I practically learned to navigate while I was on board."

The signal bridge was popular with the rest of the guests, too, because it was one place where they could see all of *Mount Baker's* evolutions. The signal bridge, presided over by Signalman 1st Class George Dreher, became the meeting place of the *Mount Baker's* new "social club."

"George was great about letting us hang around. We tried to keep out of his way as much as possible and he always made sure there was hot coffee available," one father said.

From their signal bridge vantage point, the guests watched vertreps, conreps and unreps; in addition to leapfrog exercises, gun shoots, small arms training and a host of other events.

"Vertical replenishments impressed me most," said Val Michels, father of EM1 Bill Michels. "They did it so fast. The helos would come down, hook up and be gone with the load in a matter of seconds. Before long, all the ammunition that had been set out for transfer was gone. Everyone knew his job."

Chris Geerken, nephew of pilot LTJG William Okrepkie, said he enjoyed seeing his uncle fly more than

anything else on the trip. "When he was busy flying I was up on the signal bridge watching. It takes a lot of discipline."

"I never realized these boys put in such long hours," said Alex Mihm, father of PNSN Mike Mihm. "I was really impressed with the way everybody was doing their job. I think the taxpayer is getting what he's paying for."

I was really impressed

There still remained, one more seagoing experience: "Channel Fever."

Those last few hours became a time of increased excitement and of last minute matters that were in need of clearing up. Up on the signal bridge, SM1 Dreher, by then president of the "Mount Baker Social Club" and keeper of the hot coffee, was presented a plaque decorated with Spanish *pesetas* by appreciative fathers, sons, brothers and nephews.

On the mess decks, Larry Prevo and his son MSSA Joe Lash, sat down with Ed Burris and his son MSSN Curtis Towne. The four tallied up the results of their card-playing marathon across the Atlantic, decided each team had won an equal number of games and concluded they'd had a great time!

When the ship reached the pier, crewmen, fathers and sons were greeted by waiting families. Coming home was another experience. In fact it was "the" experience that capped two weeks of new sights, sounds and adventures. It was a greater experience for little Mike Gormley—who still maintained he "got sick sometimes."

Grains of Salt

First landing at South Pole

BY LCDR GEORGE WOLFFORD

Commander Richard E. Byrd made history Nov. 29, 1929, as the first man to fly over the South Pole, but it took another 37 years to land an airplane at the bottom of the earth. That honor goes to Rear Admiral George J. Dufek who did just that on Oct. 31, 1956. Accompanied by a crew of six, Dufek hacked a hole in the ice, deposited a certificate of landing and raised an American flag on the spot in minus 58 degree weather.

"It looked just like a white Kansas wheatfield—all flat—except the wind was blowing furrows in the snow instead of waving midwest grain," said Rear Admiral Dufek in an interview last fall. (Admiral Dufek died at Bethesda Naval Hospital on Feb. 10, 1977.)

As commander of the Navy's first Operation Deepfreeze (1956-59), Dufek's mission was to establish five coastal and three interior bases. He and his men built the bases and explored a million square miles in Wilkes Land as part of the preparation for the 18-month International Geophysical Year of 1957. Before any of that could be done, however, major problems had to be overcome.

"The base at the Pole, designed to house 18 men, required 750 tons of supplies and construction material," Dufek recalled. "This couldn't be transported by dog teams or tractors. It had to be accomplished by aircraft—provided ski-planes could land and take off at the Pole. The only ski-equipped aircraft were R4Ds (DC-3s) but they were limited to a cargo load of five tons. The Air Force offered the use of their C-124 *Globemasters*. However, there were no skis for those giants."

The decision was made to use an R4D for the first attempt at landing at the Pole with a *Globemaster* flying above to observe. If the smaller plane couldn't takeoff after landing, according to the plan, the big one would parachute material sufficient to set up a temporary camp until help came. (Later in other operations, *Globemasters* would be used to parachute in supplies for building the camp after R4Ds had delivered construction workers to the site.)

RADM Dufek and Navy Captain Doug Cordiner were aboard that original flight destined to be the first to land at the Pole. Flying the R4D was Lieutenant Commander Conrad (Gus) Shinn with Commander William Hawkes as co-pilot and Lieutenant John R. Swadener navigating. Aviation Machinist's Mate 2nd Class John P. Strider was the mechanic and plane captain, and Aviation Electronics Technician 2nd Class William A. Cumbie was the radioman. After months of planning and training, this crew put down their ski-equipped plane and became the first men to arrive at the South Pole since the British foot-sled expedition of 1912 led by Royal Navy Captain Robert F. Scott.

One major concern of the crew had been the density of the snow on which they were to land—would it be too hard or too soft thereby endangering both the touch down and preventing take-off? Hawkes devised an ingenious method of determining the snow's ability to support their aircraft's weight. Hawkes had obtained a photo of Scott (of the 1912 expedition) standing in the snow at the Pole and determined how much weight per shoe the snow supported. He then extrapolated that to the ski surface and plane weight and calculated that the craft they were to fly would be able to take off and land. The crew placed their faith in Hawkes' calculations.

"We were full of confidence," said Dufek. "We had planned the landing for two years and photographed the area. The fact that our aircraft was nicknamed 'Que Sera Sera' (What will be, will be) was purely coincidental!"

As the plane flew over the Pole, Hawkes asked Dufek, "Admiral, should we land now or have the *Globemaster* drop some gear to mark the surface?"

"Use your own judgment," Dufek replied.

"We have a fair surface here," offered Shinn.

"Set her down when you're ready then," the admiral ordered.

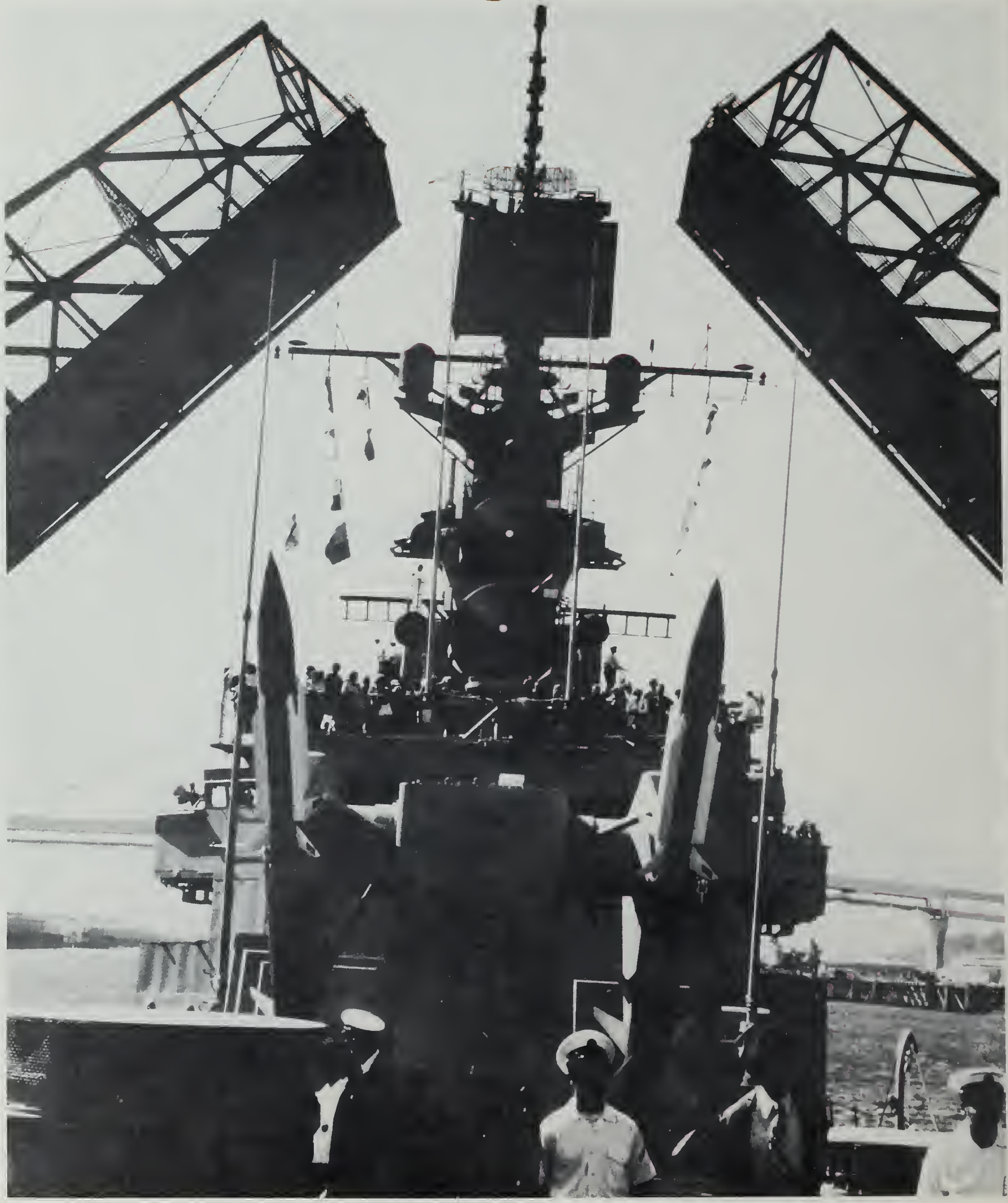
Flying above them, the *Globemaster's* pilot broke in over the intercom, "Don't worry Gus, if you can't take off, I'll bellyland this baby and give you a warm house to live in."

The plane came in smoothly, touched the surface, bumped a few times and then slowed to a stop at 8:34 p.m. (GMT). After 49 minutes on the ice, Que Sera Sera was again airborne, assisted by 15 jet-assist bottles.

One of the questions Dufek wanted answered as a result of having landed at the Pole was, "How deep does the snow and ice go." Since then, seismic studies have shown that there is more than 9,000 feet of ice resting comfortably on a piece of land 250 feet above sea level. "I got Chaplain Dan Linehan, a Jesuit priest from Boston College, to come in and do the seismic work," Dufek said. "When we had finished, I went for beer and sandwiches, keeping the beer under my armpits to keep it from freezing. Linehan drank his beer but didn't eat the sandwich and I asked why. He said the sandwich was ham and it was Friday. I told him to just walk over to the other side of the Pole and we could eat there—there it wasn't Friday anymore!"

During Dufek's tenure at the South Pole, a great deal of scientific data was collected by many nations and the Navy learned much about cold weather survival techniques—techniques still used today. The work was often rigorous and dangerous and there was little time for leisure activities. "I had a great group with me, all volunteers," Dufek said. "To see those men work under those conditions—12 to 14 hours each day in the cold—made me proud. They did it for pride, adventure, for the Navy and the United States. I called it the Bluejacket at his best." ⚓

Everything's Just Rosy



in Portland

BY LCDR DALE G. POTTS

Some may claim Navy life isn't a rose garden but Oregonians actually provide such a garden.

Uniformed Navy people are something of a novelty to Portland city's 300,000 residents since the only Navy there is a small group stationed in two reserve ships and at a local recruiting station. During the peak of this year's rose season, however, 2,700 Navy men were treated like knights—and a few actually were knighted.

Navy people have been attending the Rose Festival since 1912; the celebration then was five years old. Fact is, the old USS *Oregon*, manned entirely by Oregonians, regularly visited the event. Even today, citizens speak fondly of "their battleship," the main mast of which is enshrined in Portland.

This year, 11 U.S. Navy, five Canadian Navy, and a U.S. Coast Guard ship pulled liberty during the celebration. They didn't cruise up the Willamette River alone, though. The Navy makes its first appearance when several hundred Oregonians and assorted VIPs board the Navy ships in Astoria and undertake the nine-hour cruise up the Columbia River to the Willamette River—then into Portland. When the ships arrive, the 10-day festival begins.

Highlight is the Grand Floral Parade. This year it featured 37 floats, each decked out in natural flowers; 31 marching bands; and 46 equestrian units. Two other parades drew attention—the Starlight Parade in which 64 illuminated floats glided through the city in the evening, and the Junior Rose Festival Parade staged by children ages 6 to 13.

Other events were the Festival of Bands in which high school marching bands from all over the nation competed, the Rose Cup Trans-Am Sports Car Race, the Rose Festival Square Dance featuring more than 3,000 dancers, and the annual Rose Beauty Contest—not girls but growers competing for the "perfect rose" prize.

Intership contests pitted Navy and Marine Corps teams against each other and against foreign navy teams. The Navy also sponsored dances for both officers and enlisted men along with receptions and other social events.

The sailors took in the Fun Center, a managerie of attractions including more than 50 carnival rides and 129 booths with everything from food to games, and there was always more to see under the four Big Tops.

The sea service received much favorable radio and TV coverage. "It sure didn't hurt our recruiting chances," said one happy recruiter. There might not be a connection, but last year Portland was the number one recruiting district in the U.S.

The highlight of the celebration was the Knighting Ceremony held to honor "Those distinguished guests present." This year's newly dubbed knights are: Vice Admiral Samuel L. Gravely, Jr., Commander Third Fleet; Rear Admiral James Murray, Commandant 13th Naval District; Captain John Allen, Commander Destroyer Squadron 37; and Captain F. Kraft, Commander Destroyer Squadron 27.

Though everyone wasn't knighted, there were no regrets. ⚓

Mail Buoy

Belt Buckles

SIR: I have several questions that you may be able to answer.

After much discussion about authorized belt buckles, it was decided to ask the opinion of ALL HANDS. Would you please tell us whether the following buckle is authorized or unauthorized: Width: 1½ inches; Length 2½ inches; color, chrome plated (silver in color); decoration, inscribed with name of previous ship. The buckle has a roller pin stop and is cinched the same as the standard military belt buckle.

- *U.S. Navy Uniform Regulations, 1975, state that a "buckle may be decorated with appropriate naval insignia, designs or devices to which the wearer would otherwise be entitled." The very popular belt buckle described above is permitted for wear except that: "Personnel are to have in their possession at least one undecorated regulation belt and buckle which is to be worn for inspections and on ceremonial occasions."*

Would you please give a description of the regulation belt buckle?—CWO G.E.LeB.

- *A regulation belt buckle, available through Clothing and Small Stores, has the following dimensions: width, 1½ inches; length of frontal piece, approximately 1⅞ inches; color, brass for officers and CPO's and pewter for E-1 through E-6.*—ED.

Reunions

- USS *Sample* (DE 1048)—Reunion planned for April 1978. Plank owners contact Harry J. Wheaton, 5970 Whethersfield Lane, Birmingham, Mich. 48010.
- USS *Hammerhead* (SS 364)—Planning a 1978 reunion for World War II crewmembers. Contact George J. Chermack, 549 E. Roberts Street, Norristown, Pa. 19401.
- USS *The Sullivans* (DD 537)—Reunion in Buffalo, N. Y., August 1979. Contact Robert R. Sander, 325 Thatcher Ave., River Forest, Ill. 60305.
- USS *Phelps* (DD 360)—Fifth reunion in Greensboro, N. C., Aug. 4–6, 1978. Contact Harold Placette, 3336 Roanoke Port Arthur, Tex. 77640.

The Log Book

Here are some more excerpts from ALL HANDS articles of days gone by.

35 YEARS AGO

- Old Glory waved through the heaviest of fighting at Pearl Harbor last December 7, and, of all those proud ensigns of the U.S. Fleet which faced the fire of combat, that aboard USS *Shaw* deserves special mention. *Shaw* was exposed to intensive bombing as she lay at her pier in Pearl Harbor, finally settling beneath the water. When the battle subsided, the ensign of *Shaw* was still flying from an unsubmerged mast of the destroyer—bomb torn and bullet riddled, but still flying. *Shaw*, at first thought to be a total loss, will cruise again, thanks to the skill of Naval engineers. Raised and equipped with a temporary bow, the vessel made her way to a U.S. mainland port where she has been repaired with a permanent new bow added. When *Shaw* goes off to further sea fights, a new ensign will be flying at the mast. The ensign that refused to go under at Pearl Harbor, for all the bombs and bullets, has taken its place in the nation's collection of hallowed battle flags.

25 YEARS AGO

- Ever hear of a destroyer chasing a train? Well then, draw up a chair. It happened recently in Korea when sharp-eyed lookouts on board the tin can USS *Duncan* (DDR 874) spotted a locomotive at night chugging up the coastal track near Hungnam. *Duncan* immediately lit up the scene with star shells, like May Day in Red Square. The locomotive engineer reacted by piling on all the steam she could beg, borrow or steal. *Duncan* gave chase, trying to reach the speeding train with her five-inch shells. Unfortunately, she never quite made it. "We just about had her," the skipper reported later, "when the doggoned thing ducked into a tunnel and refused to come out again!"

15 YEARS AGO

- For the first time in its history, the surface Navy has "gone fission." This situation first occurred when USS *Long Beach* (CGN 9), the Navy's first nuclear-powered surface ship, was commissioned in September 1961. The new 14,000-ton guided missile cruiser—721 feet long, 73 feet wide and powered by two pressurized water reactors—is capable of cruising at speeds over 30 knots. Her range is almost unlimited. Armed with both *Terrier* and *Talos* missiles, *Long Beach* adds strength to our defense forces afloat. The nuclear-powered cruiser is operating with the Atlantic Fleet and calls Norfolk, Va. her home port.

Stern Shots

Many United States Navy ships have earned a place in history for their association with well-known leaders and events. Can you name these famous flagships of the past?

A *Civil War flagship of Admiral David Farragut at New Orleans, 1862, and Mobile Bay, 1864.*

B *Admiral George Dewey's flagship at the Battle of Manila Bay, 1898.*

C *Admiral William F. Halsey's flagship at the Battle of Leyte Gulf, 1944.*

F *Commodore Edward Preble's flagship at Tripoli, 1804.*

D *Served as amphibious flagship in many World War II Pacific operations; General Douglas MacArthur's flagship for the landing of UN forces at Inchon, Korea, 1950.*

E *One of Commodore Matthew Perry's three flagships during the Japanese Treaty Expedition of 1853-4.*

G *World War II Third Fleet flagship at the time of the Japanese surrender ceremonies, Sept. 2, 1945.*

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Answers: (A) USS Hartford; (B) USS Olympia; (C) USS New Jersey; (D) USS Mt. McKinley; (E) USS Powhatan; (F) USS Constitution; (G) USS Missouri.

USS TEXAS (CGN 39)

ALL HANDS

DECEMBER 1977

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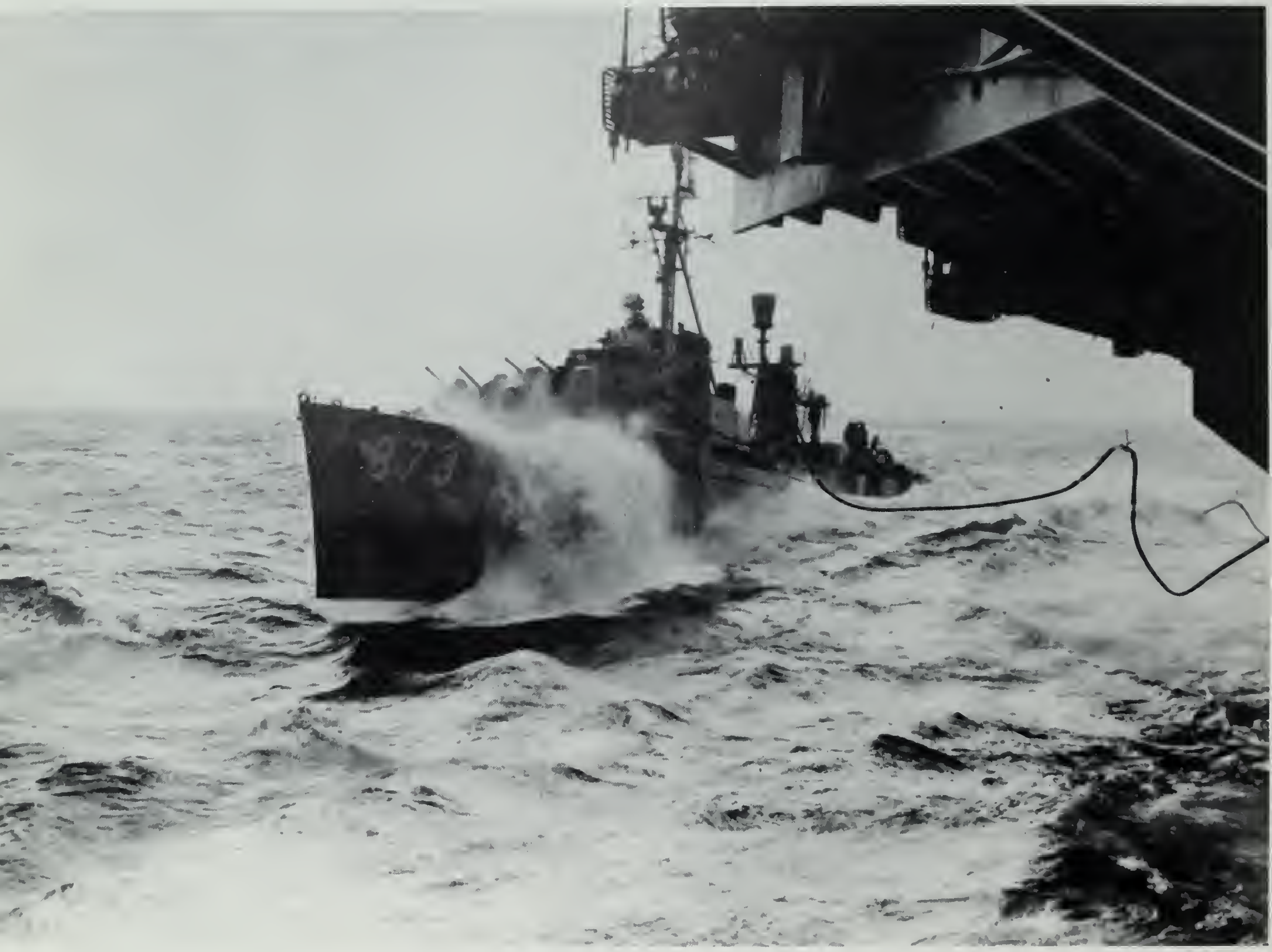

The destroyer USS Hawkins *(DD 873) takes "white water" over the bow during refueling operations with Task Force 60,* Hawkins, *a 32-year-old* Gearing*-class (FRAM I) destroyer, recently returned from her 17th, and last, deployment to the Mediterranean. With her return, the era of the deploying FRAM I destroyer in the Mediterranean and Atlantic came to a close. Commissioned in February 1945,* Hawkins *was named in honor of Marine 1st LT William Dean Hawkins, killed in action on Tarawa in 1943.*

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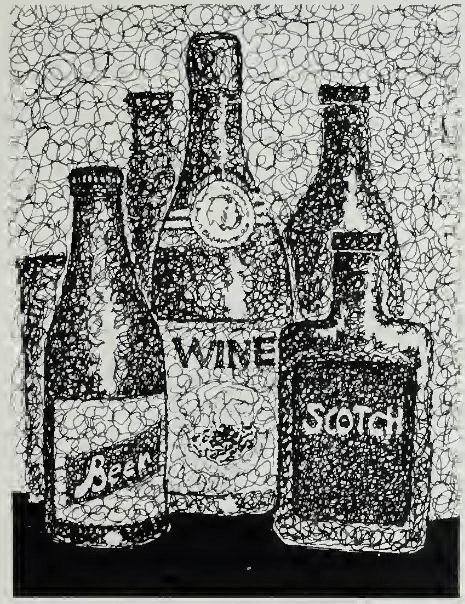

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ALL HANDS

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DECEMBER 1977 NUMBER 731

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Covers

Front: The Reserve Force destroyer USS *Miles C. Fox* (DD 829) is blanketed with ice. This winter scene was shot some years ago at Newport, R.I. Photo by W. W. King.

Back: Artist Audie Bransford highlights the career of the young Captain James Lawrence.

Chief of Naval Operations: Admiral James L. Holloway III
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Editor: John F. Coleman
Production Editor: Lieutenant Jeff Zakem
Layout Editor: E. L. Fast
Art Editor: Michael Tuffli

Staff
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Edward Jenkins
Elaine McNeil

Currents

Nationwide Childhood Immunization Initiative Announced ● A recent SecNav notice directs Navy and Marine Corps activities to participate in the nationwide Childhood Immunization Initiative. Since the mid-1960s, there has been an overall decrease in the number of children who are adequately immunized against childhood diseases. At present, less than 60 per cent of the nation's children under 15 years of age are adequately protected. The goal of the Childhood Immunization Initiative is to raise that figure to 90 per cent by October 1979. In an effort to reach that goal, activities, including the U.S. Navy,·are being asked to participate in a coordinated effort to increase public awareness of, and arouse public concern about the problem. For additional information about the program and the addresses of places furnishing publicity materials, information on how and where immunizations can be obtained and other details, see SecNavNote 6230 of 16 Sept 1977.

Navy Master Chief To Join Pay Commission ● A Navy Master Chief Petty·Officer, UTCM Robert Lewis Evans, USN, is one of three enlisted service members chosen to become members of the President's Commission on Military Compensation. Eight of the commission's 21 professional staff members are military personnel. Two Navy officers, Lieutenant Commander Richard Barchi and Lieutenant William Bobo, already have been named to the commission staff. As the Navy's enlisted representative, Master Chief Evans will join his Army and Air Force counterparts in advising the commission on enlisted sentiment about military pay, entitlements and other forms of compensation. Master Chief Evans presently is assigned as Master Chief Petty Officer of the Naval Material Command, Washington, D.C.

Enlisted Clothing Allowance Raised ● The monthly clothing maintenance allowance for enlisted Navy personnel was increased as of Oct. 1. The basic allowance was increased from $5.10 to $5.70 for men and from $4.20 to $4.50 for women. The standard rates were raised from $7.20 to $8.10 for men and from $6.30 to $6.60 for women. The basic allowance is paid from the seventh through the 36th month of enlistment and the standard allowance is paid after the 36th month of enlistment. The cost of a complete Navy sea bag increased from $327.66 in Fiscal Year 1977 to $375.13 in Fiscal Year 1978 for Navy men and from $433.25 to $437.56 for Navy women.

Reserve Patrol Squadron Receives First P-3B "Orion" ● The updating of Naval Reserve Aviation assets entered a new stage recently with the turnover of the first P-3B "Orion" patrol aircraft to a reserve squadron. Reserve Patrol Squadron 91 at NAS Moffett

Field, Calif., is scheduled to receive five "B" model "Orions" prior to the end of December. All 13 Naval Reserve patrol squadrons currently are equipped with the P-3A. The P-3B is in use by a number of fleet patrol squadrons and its introduction into the Naval Air Reserve Force marks a continuing effort to provide reservists with fleet compatible equipment under the total force doctrine.

Navy Installations Win Conservation Awards ● Naval Air Station, Patuxent River, Md., took first place, and Naval Weapons Station, Seal Beach, Calif., finished second in the Government Agencies category of the 1977 "Keep America Beautiful, Inc." awards program. The Naval Education and Training Center, Newport, R.I., was one of three government agencies to receive distinguished service citations in the competition. Patuxent River's conservation and environmental protection programs were instrumental in gaining national recognition. The Naval Air Station was cited for its pollution abatement projects that include a recycling and disposal program for petroleum and other industrial wastes and an oil spill containment and clean-up system available to both the station and civilian community. "Keep America Beautiful, Inc.," was founded in 1953 to encourage and sponsor beautification programs throughout the nation. Its annual awards program recognizes those who demonstrate, through positive action, their concern for a cleaner environment.

Navigation Satellite Launched ● A Navy navigation satellite was launched recently from the Western Test Range in California on a four-stage *Scout* Rocket. The spacecraft will bring to six the number of TRANSAT satellites in the Navy's navigation satellite constellation. In addition to navigational equipment, this satellite also contains two specially instrumented transponders or radio relays which will be used to test a *Trident* Missile Tracking System and calibrate range safety ground stations and equipment. The Satellite Navigation System is used by Navy ships and submarines to pinpoint their positions to better than one-tenth of a mile in any weather, day or night, anywhere in the world. Program sponsor for TRANSAT is the U.S. Navy Strategic Systems Project Office. Tracking support is provided by the Navy Astronautics Group.

USS Edwards Assists Smithsonian Expedition ● The destroyer USS *Richard S. Edwards* (DD 950) recently arrived at the South Pacific island of Puka Puka with relief provisions for a Smithsonian Institution expedition that was in danger of running out of supplies. Responding to a request for assistance from the Smithsonian, *Edwards* delivered food, camera equipment, vitamins and other supplies. The expedition, a man and his wife, are on Puka Puka filming one of the last traditional cultures left in the world. The provisions were picked up by *Edwards* at Pago Pago, 394 miles from Puka Puka. *Edwards* proceeded to an anchorage outside the reef at Puka Puka and transferred the supplies to a small boat from the island which ferried them ashore.

MCPON...

answering more than 8,000 questions a year

BY JO2 DAN WHEELER

Master Chief Petty Officer of the Navy Robert J. Walker has traveled extensively since assuming the top enlisted billet in September 1975. Living out of his seabag for much of the last two years, he has kept abreast of current attitudes and concerns of the fleet. ALL HANDS *recently talked with MCPON Walker about his job and Navy life in general. What follows are his candid comments about the Navy today.*

Q: *Master Chief Walker, what does your job entail?*
A: "As MCPON, I am the principal enlisted advisor to the Chief of Naval Operations and the Chief of Naval Personnel, the primary promulgators of enlisted policy. I am involved in everything concerning enlisted policies and the enlisted community as a whole."

Q: *How does your job correlate with that of master chief petty officers of the fleet, force and command.*
A: "Each of us does the same thing, but we do it at a different level. Command master chiefs, for instance, do almost identically what I do, but at the local level; force master chiefs at the type commander level; fleet master chiefs at the fleet level. All of their input concerning enlisted personnel is correlated by my staff."

Q: *How does your "open-door policy" affect sailors who have problems they feel are not being resolved?*

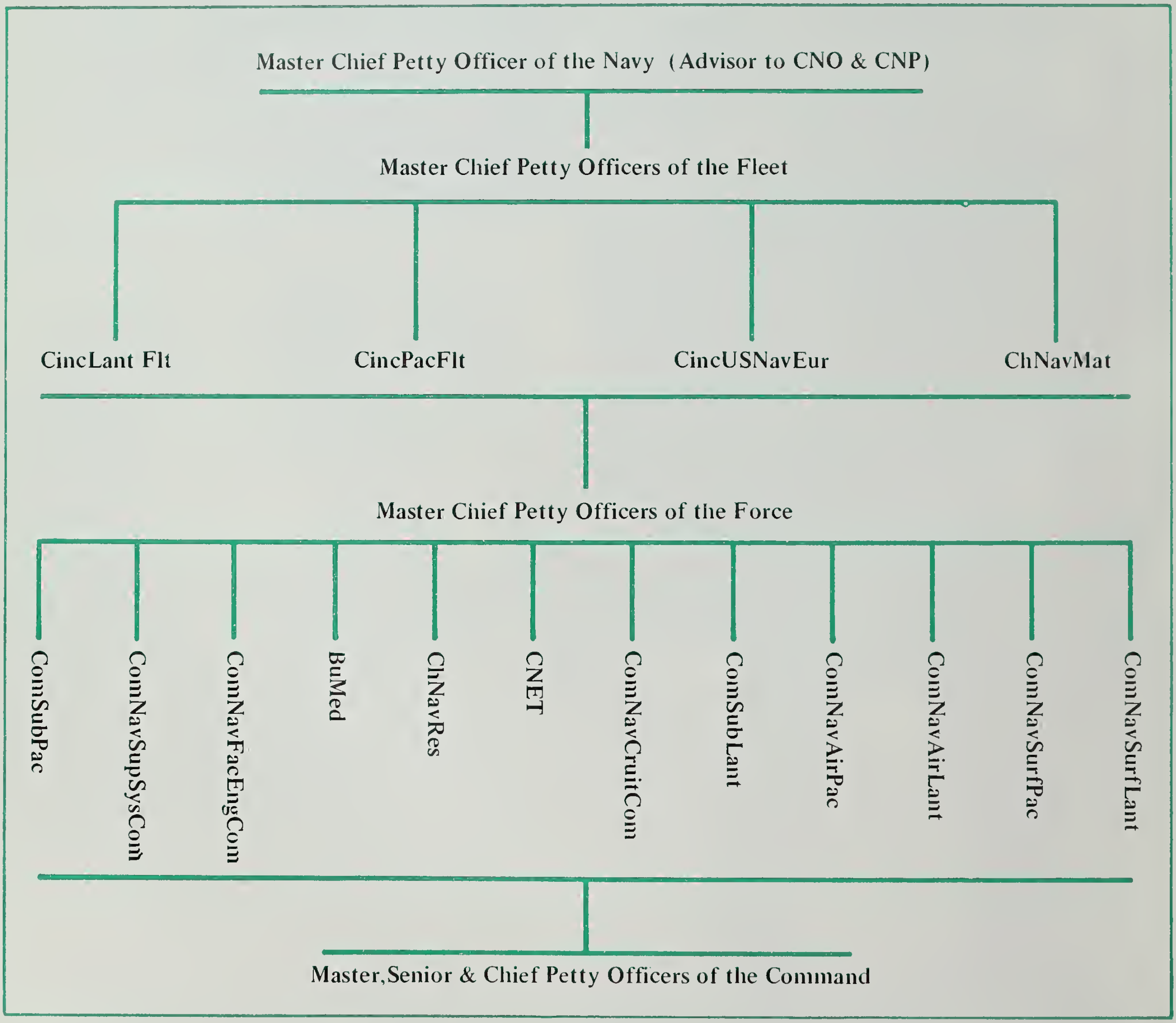
A: "If possible, he or she can come to Washington and see me or, at least, telephone or write a letter—all of this after the individuals have tried to solve their problems within the local chain of command. All correspondence and phone calls are answered. Fact is, every year my staff researches and drafts official correspondence in answer to more than 1,000 letters originating with Navy personnel, their dependents and others. Additionally, we provide answers to more than 7,000 phone queries annually."

Q: *Do you actually "go to bat" for individuals with problems?*
A: "If individuals have legitimate problems that have not been resolved at the local command level, then I'll go to bat for them. If someone is simply bellyaching about Navy policy, then I'm not going to support such an individual. However, when someone has a genuine problem—even if it doesn't affect the entire Navy—I'm going to support that individual anyway I can."

Q: *You advocate open and candid conversation between juniors and seniors "to ensure a smooth operating chain of command." Some people now feel it necessary to explain the reason for every order to subordinates. Is this what you intended?*
A: "I wasn't advocating the explaining of every order and regulation. But, if seniors are willing to communicate and explain exactly what they are trying to accomplish and why, individuals should have a greater trust and respect for authority.

"Part and parcel of this is 'command listening,' so the communication circle is complete with each party understanding the position of the other."

Q: *Why did you initiate a program which deferred automatic advancements for "A" school graduates until after a 4- to 8-month indoctrination period at their first command?*
A: "A frequent complaint by petty officers and commanding officers is that "instant POs" don't have the capability


Master Chief Petty Officer of the Navy (Advisor to CNO & CNP)
Master Chief Petty Officers of the Fleet
CincLant Flt
CincPacFlt
CincUSNavEur
ChNavMat
Master Chief Petty Officers of the Force
ComSubPac
ComNavSupSysCom
ComNavFacEngCom
BuMed
ChNavRes
CNET
ComNavCruitCom
ComSubLant
ComNavAirPac
ComNavAirLant
ComNavSurfPac
ComNavSurfLant
Master, Senior & Chief Petty Officers of the Command

when they report aboard to assume petty officer responsibilities. I strongly opposed the 'instant petty officer program' because of this. It wasn't actually helping individuals involved and usually caused them embarrassment and also made them subject to criticism. They didn't have the experience, of course, that on-the-job trainees had, and the responsibilities were an unfair burden to place on a young graduate—it wasn't realistic to expect them to be able to take charge and they couldn't."

Q: *Has this new approach hindered the Navy's efforts to attract six-year obligors?*
A: "Automatic advancement for six-year obligors has not been altered. There are objections to the program, but it is considered a necessary recruiting tool since advancement opportunity is not offered to obligors during their one, sometimes two, years of training."

Q: *Why did you initiate the proposal which placed two master chief petty officers of the fleet or force on the E-7,8,9 Selection Board?*
A: "After each Selection Board evolution, I'm inundated with letters and calls from individuals who want to know why they weren't selected. Although much printed information has been circulated about the selection process, I felt force and fleet master chiefs serving on the board would be able to field these questions and promote a better understanding of the selection process. The change seems to have been worthwhile."

Q: *What is your opinion of the enlisted evaluation system?*
A: "I don't have any criticism of our overall evaluation system. I do criticize evaluators who have a tendency *not* to 'tell it like it is.' That causes inflation in marks and breaks down the system. We could change forms and formats each year, but until evaluators began marking absolutely realistically, we would have to continue seeking an 'equitable system.'

"What has to be done—and has begun through communications from the CNO to all flag officers—is to ensure that we are realistic in our marking. Time and effort has to be spent on each evaluation written. They have to be accurate and reflect all facets of the individual performance. Unfortunately, this is not always the case today."

Q: *What can an evaluator do to ensure that a truly outstanding individual gets credit for genuinely deserved outstanding marks?*
A: "Everything about an outstanding individual indicates that he or she is, in fact, outstanding—it's evidenced by an entire naval career, not just one evaluation. Any individual deserving a superior evaluation will have the service record to sustain it and this will be noted at advancement time regardless of how many of his peers have inflated marks."

Q: *Recently the Navy increased time-in-service and time-in-rate requirements for advancement. Is this the start of a trend that will eventually have Navy people spending much more time in grade?*
A: "No, I wouldn't say that. Population growth in the Navy has bottomed out and we will be working with a fixed number of people for the foreseeable future; therefore, the Navy can only have so many petty officers and chiefs. Present policies may seem hard-nosed and cold to young hardchargers—and I guess they are—but they are still absolutely required. Yes, it's going to take longer to advance, but it's necessary if we are to continue to offer any advancement opportunities."

Q: *Why did you increase the number of billets for senior chiefs at the Army's Sergeants Major Academy at Fort Bliss?*
A: "The Sergeants Major Academy is, in my estimation, the finest school in all the armed forces specializing in senior NCO training. The Navy has no counterpart whatsoever, though I hope we will someday.

"Originally we had a quota of six senior chiefs who could attend, but with the Army's cooperation and the approval of CNP, we increased that number to 16 and added a master chief to the school's staff. I want our senior chiefs—the cream of the crop—to attend the academy because the managerial expertise they stand to gain is unsurpassed."

Q: *Other than the Sergeants Major Academy, what is the Navy doing to ensure that as a member's rank increases, his leadership ability is commensurate?*
A: "The Navy is looking into a program of leadership/ management development for its petty officers. It will probably outline a career pattern for enlisted people and culminate with a CPO academy. All of this is being examined closely and I believe we will have such a program."

Q: *With the elimination of NESEP, it seems to some enlisted people that the Navy is offering an increasing number of educational opportunities to officers and fewer to enlisted members. Does the Navy want enlisted people to seek commissions?*
A: "All of the armed forces are directed to receive the majority of their commissioned officers via their respective service academies and various ROTC programs. Because of this, programs like NESEP are considered by some as nice to have but terribly expensive and, therefore, not required. I don't foresee any substantial changes in this as far as enlisted people are concerned.

"Frankly, the opportunity for an enlisted person to advance into commissioned status is not as good as it used to be and probably won't get better as long as we have a fixed force strength. I'm not saying the Navy doesn't want enlisted individuals to become officers—most certainly they do—it's just a much tougher evolution now than it once was because, in part, there are only so many LDO and warrant officer billets. However, the primary routes to a commission—the Naval Academy and NROTC—are open to enlisted applicants. BOOST and the Naval Academy Prep School exist specifically to help personnel who may need some academic preparation to qualify."

Q: *There seems to be a large number of E-5s and E-6s leaving the Navy before retirement. Are we losing too many trained petty officers?*
A: "Whenever we lose one, I think we are losing too many. The Navy is concerned about the exodus of individuals in the 8- to 12-year service range. What's causing it? Foremost, in my opinion, is the uncertainty of the future. The petty officer and his family don't feel they are on solid ground when it comes to benefits—what's good today may be gone tomorrow.

"The second factor is crisis management by local commands—abrupt changes in policy, unnecessary inspections, etc. This creates turmoil for individuals and their families when coupled with the hardships associated with deployments. We've got to control this and give our people a sense of consistency more so than is currently being done.

"The third thing—and this is my own observation—is

that an individual has a bad day or week and makes an emotional decision to get out. All too often, he finds that the grass is not greener and regrets his decision."

Q: *Why did the Navy recently issue a new set of grooming standards with specific emphasis on hair and beard length?*
A: "It seems the problem—at least for some—was that our grooming standards were couched in terms people could not enforce. I don't really believe that, but the complaints and recommendations coming into our office indicated that supervisors wanted the regulations written so there would be no doubt in anyone's mind as to what constituted a neatly groomed appearance. Therefore, it was all spelled out in inches.

"I believe our grooming regulations were clear and if "unenforceable," it was because petty officers, chiefs and division officers didn't expend the effort to enforce them. The only effect of the "new grooming standards" was to take the old "neatly groomed appearance" and define exactly what that appearance is."

Q: *What kind of feedback have you received on the CNO's plan to bring back the bells?*
A: "Enthusiastic."

Q: *Were bell-bottoms brought back for sentimental reasons on the Navy's part?*
A: No, it wasn't a sentimental decision. The main reason was that Navy people, especially younger ones, wanted the old-style uniforms like their dads had worn. This is a good indication of the weight enlisted people carry when their views are presented to the CNO and he acts on them out of concern for them. He felt it was a good idea and I think the right decision was made."

Q: *What has been the reaction of Navy women to recent changes in their uniforms?*
A: "Their reaction overall has been overwhelmingly positive. Of course, I still run into some who don't like the new uniforms as much as the old, or they don't like certain features, but generally it has been well received. As to the maternity uniform, women have indicated to me that they thought it should have been approved long ago.

Q: *Why hasn't there ever been a Navy-wide woman Sailor of the Year?*
A: "I am sure that women will soon become very competitive in this competition though the number of female E-5s and above is limited. This year there were some women in hot contention within their individual communities and some did become local Sailors of the Year. I'm sure it won't be long before one of our Navy-wide Sailors of the Year is a woman, and rightly so."

Q: *Is erosion of benefits a real problem and, if so, what can Navy people do about it?*
A: "Too often the erosion of benefits is only imagined. The media build to a peak of negativism; this causes an emotional response by Navy people. Some things perceived as 'lost' are later sustained when Congress reviews them. Thus, Congress is not always the 'bear,' but is in fact supportive much of the time. Other agencies—IRS, HEW, for example—are involved in the 'take away process' too, so don't automatically blame Congress.

"However, Navy people should be concerned—we have had benefits taken away. The overall responsibility for this rests on our shoulders as well, because we have the privilege of voting and writing our Congressman to indicate concern when there are issues affecting Navy people. If we use this avenue and let our feelings be known—and felt at the ballot box—this would engender a genuine concern for us by our elected officials."

Q: *Considering the erosion of benefits, increased TIS and TIR requirements, and high inflation gobbling low pay raises, what is your assessment of morale in the Navy?*
A: "Your question would seem to require a negative response, but, in reality, morale is pretty doggone good. It's because of positive leadership, an effective chain of command, and our people's feelings that their problems, hopes and ambitions are important to those in command. I really believe morale is excellent."

Q: *What are the "intangible benefits" of a Navy career which you so often mention?*
A: "They are an individual thing, but generally they include the daily challenges the Navy offers, travel and adventure, friendship among shipmates—you know there is

just no value you can assign to friendship—a feeling of belonging to something important, pride in service and country. Additionally, you will normally not find concern for the individual in civilian life like you find in the Navy."

Q: *What is the status of the sea pay proposal?*
A: "I wish I could paint a bright picture about sea pay, but I can't. It's a stated CNO objective to get sea pay and he and the Secretary of the Navy are putting forth a great effort. The bill is currently within the Office of Management and Budget and we have not, to my knowledge, made the progress I had hoped in getting it through OMB and into Congress. We are having difficulties; I hope they will be resolved in the near future."

Q: *How come only 15 per cent of those eligible for government housing in the United States are getting it?*
A: "I know government housing—Navy housing—is full. All of the armed forces are severely constrained because the largest source of housing for any military community is the civilian market. The armed forces never intended to house all military families in government quarters—it simply cannot be done within the legal constraints imposed."

Q: *Why do you think a significant number of Navy people wanted a military union?*
A: "I think those who desired a union felt they were not being represented before our elected officials in the manner they felt they should have been. Because the CNO and CNP are military officers, people may have felt they were constrained. To them, therefore, a union seemed to be the answer.

"Here again, no union could represent the armed forces without being able to assure elected officials that 100 per cent of their constituency voted. So, again, the key is to vote."

Q: *How successful has the Fleet Readiness Improvement Program been and how has it affected shore establishments?*
A: "FRIP has been extremely successful and our ships are 100 per cent manned. In all candor, quite a few exceeded the 100 per cent mark; there seemed to have been a reluctance to want to tell BuPers 'Turn the spigot off, we're getting too many people!' However, shore establishments were affected—the same job had to be done with far less people and it was done. Now the 'spigot' to the fleet is off and it is conceivable that shore establishments will be back up to above 90 per cent manning by October 1978."

Q: *What effect has energy conservation had on meaningful training and, in turn, fleet readiness?*
A: "I would have to think that there has been an adverse effect, but readiness hasn't been affected to the point that some people would like to think. The Navy is trying to get in as much at-sea training as possible within allotted resources. Additionally we now have refined the art of synthetic training—trainers and 'fast cruisers,' for example—to supplement underway training. Synthetic training is meaningful and real to participants. We've made great strides in maintaining readiness in this fashion."

Q: *How serious is the alcohol/drug abuse problem in the Navy?*
A: "We have a serious problem. However, I don't believe there is any segment of society trying more diligently to correct the situation nor is there one with a finer alcohol rehabilitation program than the Navy's. We don't hide the alcoholic and he or she is no longer stigmatized by exposure. In the last E-7 Selection Board, for example, the recovered alcoholic's chance for advancement was the same as that of his non-alcoholic peers. So we're doing a good thing with our alcohol program.

"One thing people who criticize alcoholism in the Navy don't realize is that many youngsters coming into the Navy already have a heavy drinking habit. After two years, the individual's consumption has often decreased due to Navy educational efforts. We didn't cause the problem, but we are doing something to correct it.

"In the area of drug abuse—I'm excluding alcohol here for discussion purposes—we're not making as much significant progress as we have in alcohol rehab. I don't know if this is because of society's outlook on so called soft drugs, or what. Still we have to keep a tight rein on the entire alcohol/drug picture. We simply can't afford to have individuals who are not in full control mentally and physically—there's too much at stake."

Q: *What can married Navy people—both of whom are in uniform—do to better their chances of getting husband-wife duty?*
A: "A married couple should immediately file their Duty Preference Cards. The woman should note on her card that she is married to PO2 'X' stationed at US Naval Station, or whatever; the man should do the same thing. Their two

detailers will make every effort to station them geographically close together. There will be separations though, just as there are when sailors are married to civilians. Some separations could be avoided, however, if married military personnel informed their detailers of their status in the proper manner—via the DPC."

Q: *Now that the Coast Guard is sending women to sea, will there be a similar change in Navy regulations?*
A: "That's a decision that will have to be made by Congress. I think women can be useful in billets at sea. The Navy needs greater flexibility of assignment than it currently has since its female population has been steadily increasing."

Q: *What about joint service marriages—can they hope to be stationed together?*
A: "In all honesty, I have to say it would be based on pure chance. That's an almost impossible detailing problem to overcome."

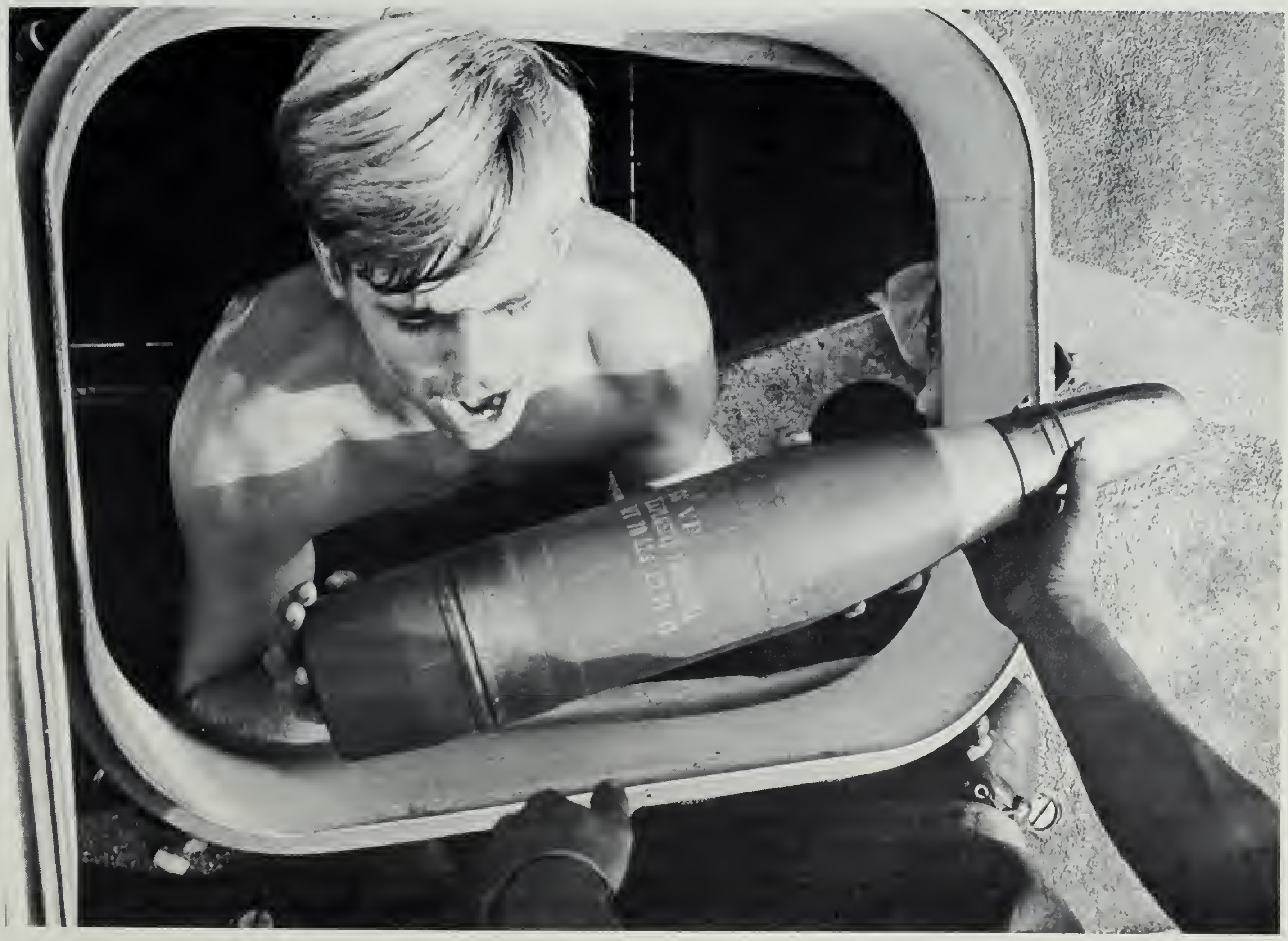
Q: *Does the Navy stress the importance of an informed dependent community?*
A: "I don't think anything could be said to overemphasize the importance of an informed dependent community. Recently the Navy held a retention conference; one main topic discussed was how to keep dependents informed. We have got to do better in this area and Navy-wide efforts are being made to improve the situation."

Q: *Can we expect Navy commands to call dependents together regularly to inform them and field questions?*
A: "Many commands already do this—especially before deployments. All commands should do it."

Q: *What is the purpose of the Petty Officer Quality Control Review Board and does it operate as envisioned?*
A: "The board's purpose is to 'weed out' individuals who are not responsible petty officers. I can say with absolute confidence that the board is doing an excellent job and I believe they will become even more effective."

Q: *In what areas does the Navy still need to devote more time and attention?*
A: "If I had to single out one area needing the most total improvement, I would cite leadership/management training. We are looking into a program to correct this."

Q: *Finally, what quality is essential to a person desiring to make the Navy a career?*
A: "The most important quality or qualification is that the individual must personally—deep inside—like the Navy. If he does, he will probably achieve success." ⚓



Rights & Benefits

Travel Opportunities

People join the Navy for many reasons, not the least of which is an opportunity to travel. "Join the Navy and see the world" beckoned the old recruiting posters and they're just as true today as then. Choose a place, any place, anywhere, and chances are the Navy is already there or goes there regularly.

Navy people serve in every state and in just about every country in the free world. There are more than 3,000 Navy activities ranging in size from small recruiting stations scattered across the nation to great naval complexes like Norfolk, Va., and San Diego, Calif. There are billets to fill in ships, submarines, aircraft, at shore stations, the South Pole and even in foreign navies. If traveling is your bag, the Navy can fill it.

O.K., your bags are packed and you're ready to go—what next? If you know exactly where you want to go and nothing is going to change your mind, get the word to your detailer in Washington, D. C. Do this by completing a Duty Preference Form (NavPers 1306/63), available from your career counselor or personnel officer. You should submit a revised Duty Preference Form whenever there is an important change in your personal status—such as a change in number of dependents—and, of course, whenever your duty preferences change.

The Duty Preference Form is a key element in the Navy's computerized duty assignment system and it tells your detailer where you would like to be stationed (listing first, second and third choices). Sometimes, the type of duty or the location you requested is not available, but, in all cases, your preferences will be given every possible consideration.

Suppose, though, your bags aren't packed, but you would really like to go somewhere if you only knew where "somewhere" could be? Take a closer look then at some of the Navy's travel and duty assignment opportunities:

- The Guard Program—Guaranteed Assignment Retention Detailing—it's a go-where-you-want-to-go program that comes complete with a written guarantee that you'll go there if you meet the requirements and agree to reenlist for a minimum of four years. To qualify, you must be a top performer in one of the eligible ratings—CREO group A, B or C.

First term Navy people eligible for Guard receive a letter from their detailer about six months before their EAOS in which they are offered a number of assignment options. This is your chance to pick your own assignment, any place from your hometown to an exotic foreign city. In the event your duty choice is not available or cannot be approved, every effort will be made—before you reenlist—to find a duty station that meets your personal requirements.

It's not only for first termers either; second term members interested in Guard assignments are invited to apply. Talk over the possibilities with your detailer and then complete the necessary applications.

- U.S. Naval Support Force in Antarctica—This sea duty is worth double credit and gains an Antarctic Service Medal, not to mention the challenge of being part of the task force supporting long-range scientific programs carried out under the auspices of the National Science Foundation. Other benefits include early advancement, if eligible, and a seven-day rest and recreation period at Christchurch in New Zealand. After your one-year tour, you also get reassignment benefits—that could well mean any available duty assignment you choose.

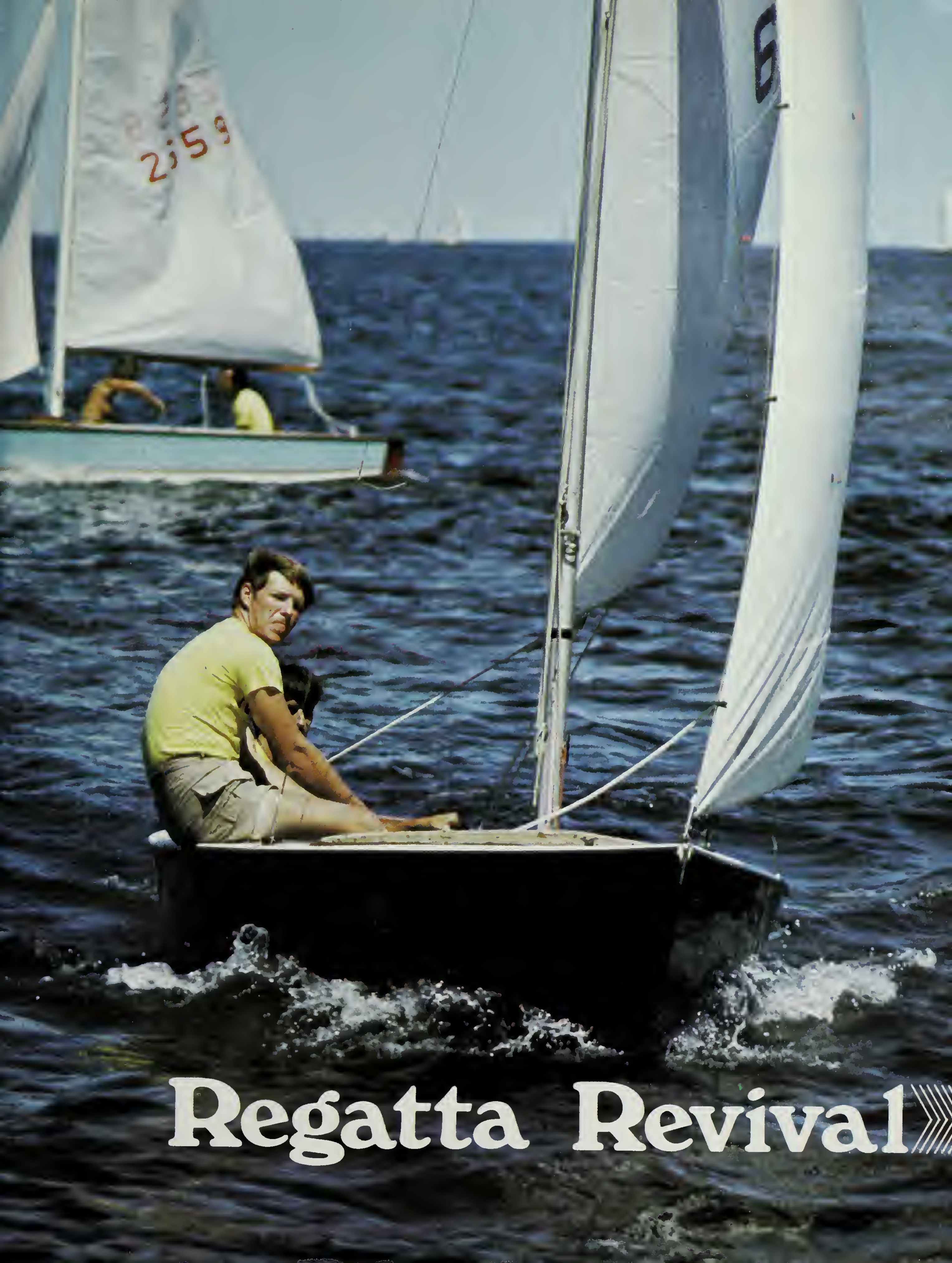
If you're interested, have your career counselor check chapter nine of the Enlisted Transfer Manual and BuPers Notice 1300 of 8 April 1977 to see if you qualify.

- Overseas Assignment—You can't see the world unless you go there and an overseas assignment gives you an opportunity to see part of it firsthand and at your leisure. Chapter four of the Enlisted Transfer Manual spells out the qualifications required for each billet and indicates tour lengths and obligated service necessary. If you think you qualify for an overseas assignment, the next step is to complete a Duty Preference Form or Enlisted Special Duty Request Form, available from your career counselor.
- Overseas Homeporting—If you would like to serve overseas, but are not eligible for shore duty, you might consider duty with a ship, aircraft squadron or staff which is homeported overseas. You can bring your family and, currently, almost all enlisted rates and ratings have an excellent chance for transfer to overseas homeports.

Currently, there are fleet units homeported in the following locations: Gaeta, Italy; Guam, Marianas Islands; Holy Loch, Scotland; LaMaddalena, Sardinia; Naples, Italy; Rota, Spain; Subic Bay, Republic of the Philippines; and Yokosuka, Japan.

Procedures to follow to get a transfer to an overseas location are outlined in BuPersInst 1300.40A. Your career counselor will explain the qualifications and provide any help necessary to arrange a transfer at your rotation date or EAOS.

Travel is something most people want, but few can afford to go to the places of their dreams. In the Navy, you can see the world or any part of it you desire. The opportunities are here—why not take advantage of one today?

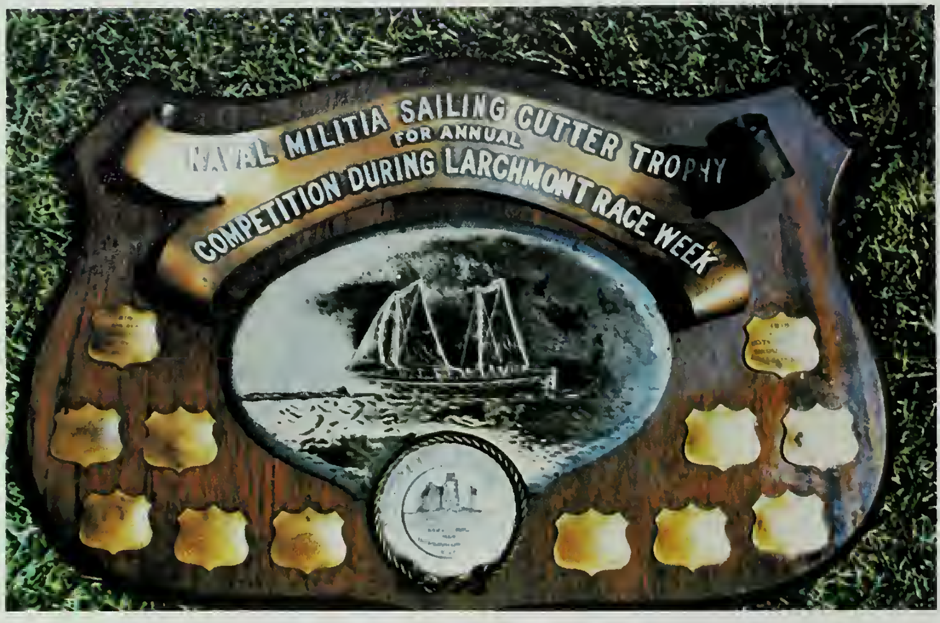


Regatta Revival

Regatta Revival

BY JO3 FRANCIS BIR

There was an old warehouse at the Naval Reserve Center in New Rochelle, N.Y., that needed a good cleaning. It had stuff in it that hadn't been touched in years. One of the items there was a big, ugly, old trophy made of bronze and silver, dating back to 1907. It was a sailing trophy that hadn't seen the light of day in over 60 years.


NAVAL MILITIA SAILING CUTTER TROPHY
FOR ANNUAL
COMPETITION DURING LARCHMONT RACE WEEK

The last entry on its tarnished plate named the New York Naval Militia, Battery "B," as the winner of the Naval Militia Sailing Cutter Trophy regatta. That was in 1916.

Battery "B" won that race in a two-masted, wooden long boat. The rules of the race allowed for the teams to row their boats if the wind died down to less than 5 knots.

After the last race in 1916, the trophy was stowed away; the sailors went off to join in the "Great War."

That was the last time anyone saw the trophy that had originally been a major prize in the Larchmont Race Week since the regatta was started in 1907. That is, nobody saw it till several months ago when Commander Bill Burns, commanding officer of the reserve center, found it.

When word spread, Commander Larry Miralia, a reserve officer at the New Rochelle center, who is also acting commodore of the Long Island Sound Naval Sailing Association, thought it would be a good idea to

Photos by
CDR Thomas J. Dufficy

put the trophy back in circulation. So, with support from the Naval Sailing Association, the Larchmont Yacht Club, and the Ensign Burke Chapter of the Naval Reserve Association acting as the race committee, the regatta was on.

Teams were invited from all over the United States. Naval attaches at the foreign embassies were contacted

Regatta Revival

and invited to sail in competition.

Among the 18 teams entered in the races were those from the Royal Navy, the Canadian Navy, the U.S. Air Force, the Naval Academy, the New Zealand Navy and local reserve units from the greater New York area, as well as other active and reserve Navy teams. The Larchmont Yacht Club provided 15-foot "Bluejay" racing sloops.

Three races were held on a very sunny Saturday in July. It was a perfect day for sailing, with northwesterly winds gusting to 25 knots. Two reservists from USS *Harlan County* (LST 1196), LT Drew Bisset and BM3 Dexter Alderezzio, won the honor of being the first to have their names inscribed on the old trophy in more than 60 years by winning the best of three races. They wound up with a record of two firsts and a second.

Second place was taken by representatives from the Norfolk Naval Sailing Association. And the third place winner was the man who arranged the whole thing, CDR Larry Miralia.

After the races, the Larchmont Yacht Club sponsored a clam bake for the participants and guests. The whole affair was considered such a success that the Naval Militia Sailing Cutter Trophy Regatta will be continued indefinitely.

Next year the sponsors hope to invite 10 teams from foreign navies and 10 from the U.S. Navy. Sailors interested in joining next year's regatta and getting a chance to have their names added to an old relic should contact CDR Larry Miralia, Commodore, Long Island Sound Naval Sailing Association, c/o Navy and Marine Corps Reserve Center, 270 Main St., New Rochelle, NY 10801. ⚓

Information Exchange

Q. *The Defense Department now has a modern jet airlift force, supported by commercial air companies in time of an emergency. Does the Navy still need to maintain a sealift force?*

A. Between 1964 and 1973, more than 74.5 million measurement tons (40 cubic feet per ton) of dry cargo were sealifted to Southeast Asia, as were 16 million long tons of petroleum products. Some 400,000 troops were also moved by sea in the early phase of that war. More than 95 per cent of the entire volume of supplies delivered to Southeast Asia moved by ship. This will be true in any future emergency, a fact illustrated by the war in the Middle East. Airlift and sealift are not competing modes of transport. Airlift can deploy troops quickly and move high priority equipment. But, the huge volume necessary to maintain a deployed fighting force requires ships which have a far greater capacity than aircraft.

Q. *I have signed up for a correspondence course that is VA approved, but I'm having second thoughts about the course. If I cancel, am I liable for the contract?*

A. A contract for enrollment must be affirmed by the student more than ten days after the contract was signed. If more than ten days has expired and you have signed the affirmation agreement, you can be charged for a portion of the course.

Q. *I have a $10,000 National Service Life Insurance policy. It is a term contract and the premium escalates every five years. The cost is becoming prohibitive. Are there any options available to me?*

A. You may convert your term policy to a permanent contract. In addition to a stabilized premium, your policy will accrue a cash value.

Q. *What is the Board for Correction of Naval Records (BCNR) and what exactly does it do?*

A. BCNR is composed of high-ranking civilian employees of the various bureaus and offices of the Navy Department and from Headquarters Marine Corps. BCNR can be petitioned for the correction of any naval record in order to correct an error or to remove an injustice. Cases reviewed include requests for corrective action involving the removal of officer fitness reports, removal of enlisted evaluations, review of unfavorable discharges, review of physical disability retirements, review of nonjudicial punishment, crediting of constructive service, entitlements to reenlistment bonuses, corrections to dates of rank, etc. Upon review of all the documentary evidence of record pertaining to the alleged error or injustice, the Board may deny an application without a hearing, recommend relief without a hearing or set the case for a hearing. Hearings are based upon documented evidence and the burden of proof rests with the applicant. Applications for correction of naval records under the provisions of Title 10, U.S. Code, Section 1552 (DD Form 149) may be obtained by writing the Board for Correction of Naval Records, Department of the Navy, Washington, D. C. 20370. See BuPersMan, 5040200, for further information.

Q. *How much can I actually save by shopping at the Navy Exchange?*

A. Retail price surveys show that customers can save between 20 and 25 per cent by shopping at their Navy exchange. The Navy Resale System Office in Brooklyn, N.Y., develops this information by conducting semiannual price comparison surveys between Navy exchanges and commercial stores; price surveys are conducted in the spring and fall of each year. Exchange prices on 150 items are compared with local commercial prices. Results of a 1976 survey, published in July, show that Navy exchanges provided a savings of 21.9 per cent when compared to average retail prices charged in commercial stores.

Q. *How are alternates for advancement selected?*

A. Alternates are selected for advancement in paygrades E-7 through E-9 only. About 16 months before the final increment of an advancement cycle, the number of people needed to fill the anticipated vacancies in each paygrade is determined. Since this is an estimated number, a proportionate number of alternate candidates are picked for each rate and paygrade. The selection boards first identify those primary selectees who will be advanced during the advancement cycle. The boards then select the alternates. It is important to note that all individuals on the primary list must be advanced before any alternates may be considered for advancement. And, depending on how many vacancies exist when the primary selectee numbers are compared with the total authorized Navy end strength for each paygrade, the alternate list may be executed in whole, in part, or not at all. In addition, alternate selectees are advanced first in the most undermanned rates. Finally, alternates that are not selected for advancement during the particular advancement cycle are no longer eligible for advancement, but must be reselected by a subsequent selection board. ⚓

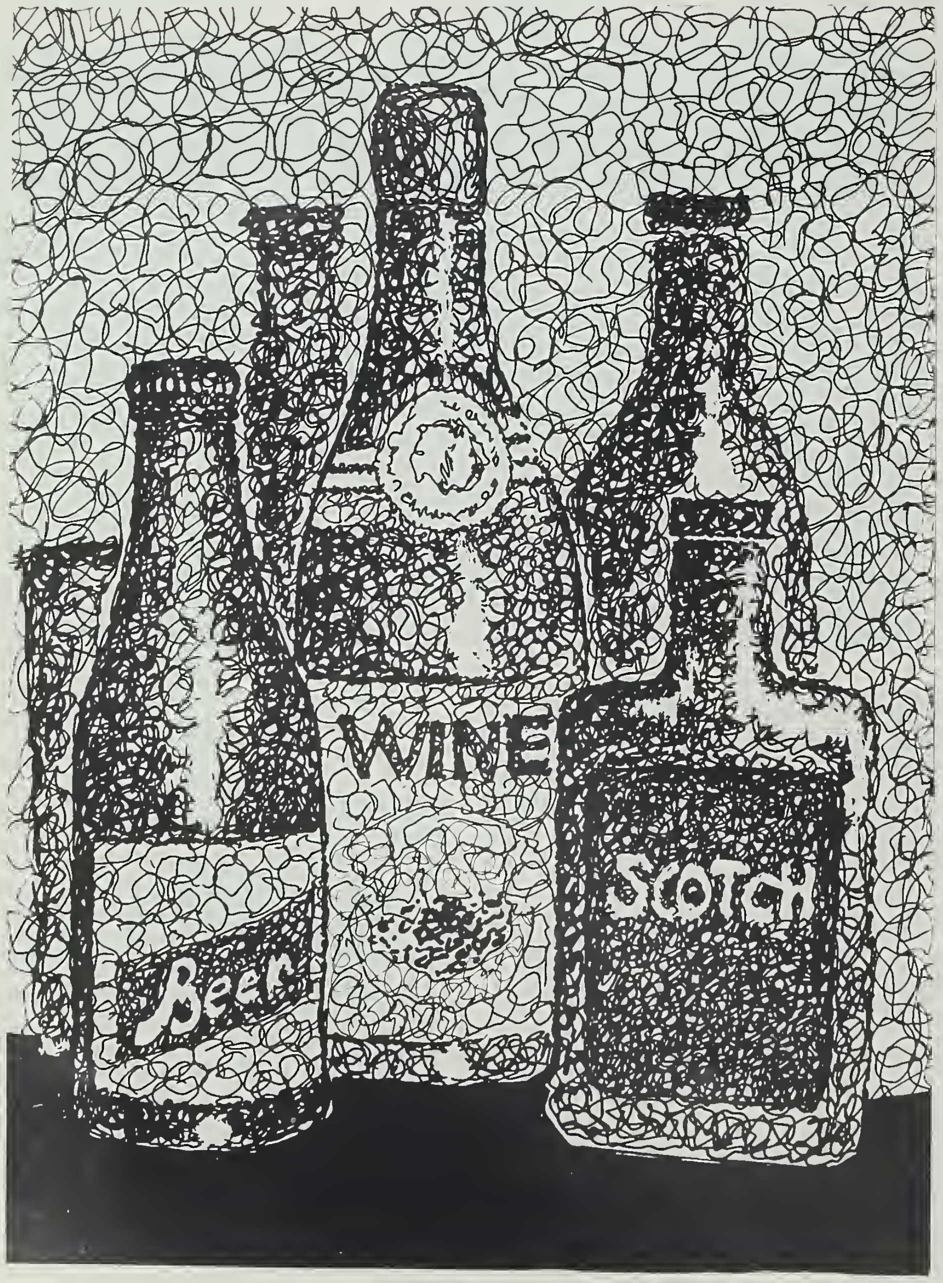
It works at Lakehurst

BY BUD SHARKEY

"In 30 days, you can be sober for the rest of your life," said Lieutenant Peter R. Churins, a 10-year Navy veteran and director of the Counseling and Assistance Center/Alcohol Rehabilitation Drydock (CAAC/ARD), at the Naval Air Engineering Center, Lakehurst, N.J.

Churins has been director for two years, long enough to become enthusiastic about the program and long enough to attest to the Navy's need for it.

"We are treating 20 to 30 people a month for drug abuse and alcoholism," he said. His clients come from Lakehurst's many commands, the Naval Weapons Station, Earle, N.J., Brooklyn and Philadelphia activities. "About 20 per cent come in voluntarily for assistance, the rest are sent, ordered by their commands for screening and, if necessary, treatment.



"A person does not necessarily have to be willing to enter the program, that's a common misconception. What some don't realize is that the individual is under the influence of a drug, and if you get him into a drug-free environment for a period of time his bodily systems change, and his attitude, therefore, changes. Regardless of whether or not they want treatment, a certain percentage will get better."

That philosophy seems to be producing results Navywide. Seventy per cent of the Navy personnel treated for alcoholism, for example, are successfully rehabilitated and restored to effective duty. "The program is going strong because we are putting a product back into the Navy," Churins said.

While treatment is important within the CAAC/ARD framework, it shares a dual function with diverse counseling and education provided by staff members, or arranged with local community experts. "We're in business to offer drug and alcohol counseling, and to help people with personal problems. Ours is multi-faceted treatment, we're trying to treat the whole person," Churins said.

"For example, last March we worked closely with the Navy Regional Medical Center clinic in sponsoring a physicians' education project on alcoholism, in conjunction with the University of Pennsylvania and the Physicians' Education Training Project." More than 100 military and civilian physicians attended.

"Approximately every six weeks we run a drug and alcohol education course open to all military commands within our district. We recently completed a three-day course for training collateral duty counselors at the Naval

Air Development Center, Warminster, Pa., and a three-day exemption representative course for Destroyer Squadron Thirty in Philadelphia."

Three times weekly, Alcoholics Anonymous meetings are held at the CAAC/ARD; ALANON and ALATEEN groups meet weekly.

According to the National Council on Alcoholism, ten million Americans suffer from the disease of alcoholism, and the alcoholic is often the last person to recognize the sickness.

While it is possible for someone—an active duty, Reserve, or retired service man or woman, civil service employee or dependent—to seek and receive assistance, most alcoholics do not identify themselves as such and, therefore, must be ordered into treatment. Churins said, "It's the supervisor's responsibility to get the man into screening. It's available and it works. But the sooner we get the individual, the easier it is to treat him."

Treatment is generally a 30-day program that begins with a medical evaluation. Churins stressed the medical personnel are an important part of the entire program and, in addition, they also are often the first ones to identify alcoholics and drug abusers and begin the treatment process.

"Currently we are running drug and alcohol abusers together in a self-awareness group which meets for an hour or two each day," Churins said.

The group part of the program is designed to give clients a wider perspective of their situation by interaction with other clients.

The staff is in the business of helping people.

A major thrust of the program is to provide the clients the tools they need to create and then maintain a recovery program. A nurse lectures on proper diet and nutrition. A medical officer explains the medical impact of drug and alcohol abuse. Security and Navy investigation service personnel outline the legal ramifications of abuse.

"We see Alcoholics Anonymous as the best long-term program there is. It gives them a personal contact—they're not alone," said Churins.

Are the different forms of counseling important to the alcoholic and members of his family?

Statistics show that 40 per cent of cases reaching family court in the United States involve alcoholism. As many as 40 per cent of delinquent children, too, are the products of families which are headed by an alcoholic.

Trained Navy people, usually career-designated petty officers, conduct the CAAC/ARD treatment—they are all volunteers who must successfully complete tough Navy schools. At Lakehurst, the lieutenant strives to provide his staff with experiences to build their skills and supplement their classroom training. His staff includes Chief Aviation Boatswain's Mate (Launching and Recovery) Frank Cox, Builder 1st Class Bill Barchett, Hospital Corpsman 2nd Class Walter "Mickie" Finn, Seaman Paul Ronan, and Miss Joy Groetzinger.

"This isn't an easy job," Churins said, "but it's tremendously satisfying. It shows that the Navy can effectively take care of its own. A lot of the program is just simple human concern, one person for another."

It works for one man

Jack is an alcoholic, high-school dropout, drug abuser, product of a broken home, and the father of a child he has never seen, by a woman who is not his wife. Jack is only 18.

A common theory is that alcoholics and drug abusers aren't born; they're created. Family problems, hostile environments, financial chaos, and a myriad of personal problems become too much to cope with. Alcoholism is the symptom that becomes the problem. Jack is a living example.

His parents divorced when he was 14. With his mother, he moved from Atlanta, where he had been using and dealing in marijuana, to Tampa. There he became involved with a woman 11 years his senior. He quit school. On his eighteenth birthday, he enlisted.

"After I got out of boot camp," he

said during an interview at the Lakehurst Counseling and Assistance Center/Alcohol Rehabilitation Drydock, while still in treatment, "I started thinking the service wasn't for me; I started drinking real heavy." He went over the hill but got a second chance and was reassigned to a school. But he didn't learn his lesson and went UA again. This time, he was ordered to the CAAC/ARD for screening as a possible alcoholic.

"The first couple of weeks at the drydock, they couldn't get me to do anything. Then they started to straighten me out. They tell you it's *your* life. If you're trying to fool somebody, you're really just fooling yourself."

Jack hasn't had a drink for a month. "I've been going to Alcoholics Anonymous meetings almost every night. I just don't need booze anymore. I found out from associating with different kinds of people that you don't have to be high to have fun.

"They have a beer machine in the barracks. I can walk up to it, stand beside it and it doesn't even bother me. All it takes is the will to change; that, and help from other people."

Jack says he's been getting plenty of help from CAAC/ARD staff members and some of his military superiors, along with civilians from the local community. "I know people I can call for help at any time."

Jack still has problems and he admits it. "Lots of people still think they can order you to quit and you can quit. Well, it doesn't work like that. Alcoholism is a disease."

He expects he'll be watched closely if he's allowed to stay in the service. He expects any future trouble to come from people who have problems themselves with alcohol. "However, I'm able to see other peoples' problems, now. I've been through it."

His personal problems weigh heavily on his mind. "I've got an 18-month-old son I have never seen. I've been thinking about him a lot since I've been here."

Jack seems confident that he can go in a positive direction from this stage. If allowed to stay in the service, he says he'd like to get an equivalency diploma, and possibly work toward a college degree. "If I get the opportunity, I know I can do it. People are starting to see how I'm getting squared away."

"The cost is worth it"

Today, there are two answers to that old refrain, "What do you do with a drunken sailor?" You can give him the minimum treatment required under the law, perhaps help him straighten out his seabag and then politely—but firmly—show him the door.

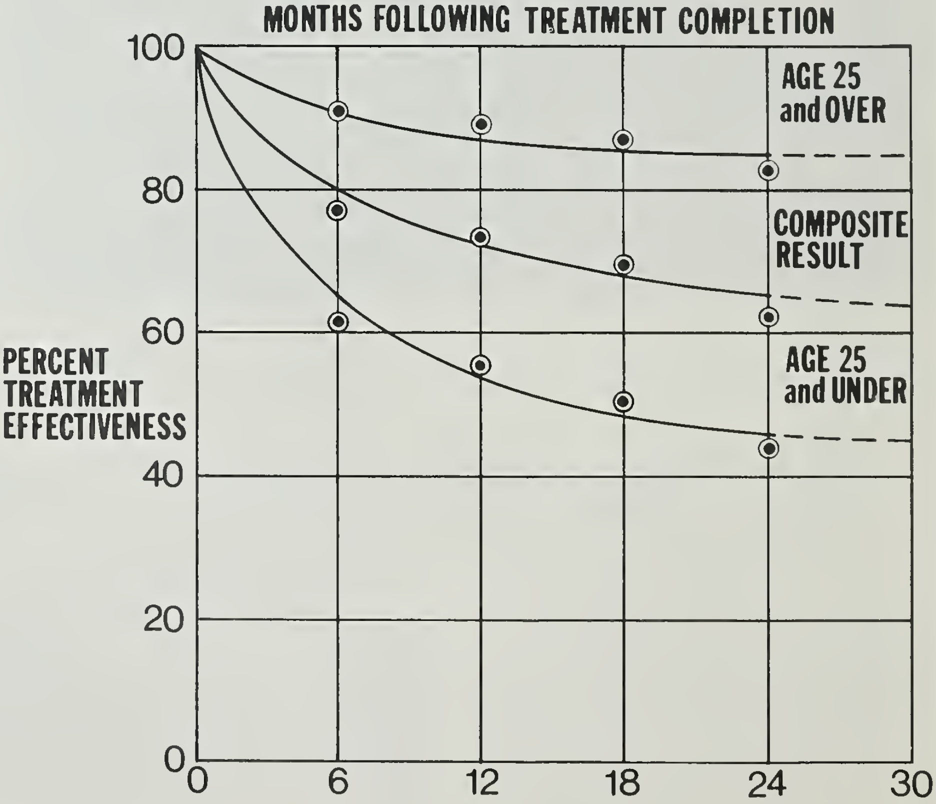
Or you can try to identify the problem drinker early, get him into a comprehensive alcoholism treatment program and, hopefully, return him to duty fully recovered and likely to remain that way.

The Navy likes the second approach. Indeed, three large Alcohol Rehabilitation Centers (ARCs), three Alcohol Rehabilitation Services (ARSs), 17 smaller Alcohol Rehabilitation Units (ARUs) in designated naval medical centers, and 56 local command Alcohol Rehabilitation Drydocks (ARDs) including aircraft carriers are all working to make this method of dealing with alcoholics a success.

The Navy likes this approach because it is also the human approach: helping out your fellow sailor in trouble. But it is also very expensive.

Last year, more than 17,000 active duty Navy and Marine Corps personnel were treated at these various alcohol rehabilitation facilities. It cost the government $22.6 million (including patients' pay while in rehabilitation) to treat the 5,077 *resident* patients of these facilities. The other alcoholics were treated as either outpatients or nonresidents.

Since about 95 per cent of the alcoholics treated to date have been enlisted, the study focused on this group



of people and, specifically, upon the enlisted who received residential treatment—which generates higher costs than nonresidential treatment.

This is not to suggest the Navy's economic problems of alcoholism are only in the enlisted community. Expansion of the study into the officer corps would show an increased value of the Navy Alcohol Prevent Program. For example, the successful rehabilitation of a naval aviator with 1 to 10 years since designation represents a savings of $65,000 to $400,000, depending on costs of undergraduate pilot training and readiness training for type and model of aircraft.

Counseling dependents.

It is to the Navy's advantage that these people get back on the job. But since the Navy cannot assume alcoholism rehabilitation as a primary mission and because military money is tight and likely to stay that way, the Chief of Naval Personnel commissioned a private research firm to find out if the money spent is worth it.

The results of this recently released study show it would have cost the Department of the Navy $49 million if these alcohol-dependent personnel were discharged. Instead, the $22.6 million spent on rehabilitation resulted in a $26.4 million net savings by cost avoidance. In addition, substantial numbers of skilled, experienced Navy and Marine Corps personnel were retained on continuous active duty.

The study, which spanned a two-year evaluation period, also took a look at how effective the Navy's alcoholism rehabilitation efforts are, what happens to the alcoholic sailor and what can be done to further increase the Navy's ability to economically treat and return the alcoholic sailor to duty. Some of the findings of that study:

- The alternative of arbitrarily discharging diagnosed alcoholics and replacing them with new personnel is 2.2 times more costly overall than the present alcoholism rehabilitation program. Most important, the advantage of rehabilitating career personnel with 5 to 15 years service is almost 6 to 1. In other words, for every dollar spent in treating a 5 to 15 year career person, six dollars are saved in terms of potential future years of service by those career personnel.
- Treatment effectiveness for age group 26 years and over is 83 per cent. For those 25 and under, the effectiveness rate is 44 per cent. Effectiveness is defined as: "If at the 24 month point subsequent to treatment the individual is, 1. performing as well as, or better than peers, 2. recommended for promotion, 3. recommended for reenlistment (or has received an honorable discharge if no longer on active duty)."
- Before treatment, alcoholics have a sick day rate three times higher than the average Navy-Marine Corps service member. The rehabilitated member's sick day rate equals the Navy-Marine Corps average.

Based on these and other findings, the study recommended:

- Stressing early identification programs to increase the chances of treatment success and to reduce the strains placed on the health care facilities for in-patient treatment. This early identification program should allow nonmedical personnel, like supervisors, to spot alcoholism problems like declining work performance, domestic difficulties, indebtedness, traffic and other civil offenses, and military offenses such as disrespect, insubordination and unauthorized absenteeism. In the medical area, the report recommends lab tests for alcohol abuse be accomplished at induction, and during reenlistment and annual physical examinations.
- Educate management levels regarding the characteristics, costs and other effects of the disease of alcoholism and alcohol abuse.
- Reexamine the several types of alcohol treatment available to determine which is most effective for each segment of the alcoholic population. For example, the Navy Alcohol Safety Action Program (NASAP) may be more effective with the younger abusers who can benefit from the 36 hours of concentrated remedial education instead of formal alcoholism treatment.

The study noted that the Navy's treatment methods are generally similar among the different types of facilities. Treatment is a combination of the best multidisciplinary medical technology, professional and paraprofessional counseling, and use of Alcoholics Anonymous. There is also the ability to vary the treatment to meet individual needs.

The 12,000-plus outpatient and nonresident alcoholics received effective treatment at less cost to the Navy. This is not to say all alcoholics should be seen on an outpatient basis. The severity of alcohol abuse among some dictates they be placed in a controlled hospital environment if recovery is to be effected.

The study confirms what Navy planners have felt for some years. The program works well, is cost effective, is legally and humanely sound both for the Navy and the sailor, and enhances readiness by keeping experienced people on the job.

Alcohol abuse problems in the United States are a $42.75 billion a year hangover. By conservative estimates, alcohol abuse in the Department of the Navy results in an annual $360 million to $680 million economic loss. In light of these figures, and, given that an alcohol abuser on the job endangers not only himself but his fellow workers, the image of the happy-go-lucky "drunken sailor" takes on a serious edge. He's not funny or witty or pleasant to be around and while he may be trying to prove to himself that he is a "he-man," he is really a hazard and a serious liability.

The 'Lakes' Has it All Together

BY LT DONALD R. NONTELLE

Great Lakes? You've just called your detailer and he said, "Great Lakes!"

You are frantically thinking, "Me? . . . Orders? . . . Great Lakes? . . . That cold, frozen winter wasteland? Home of 0500 reveilles, double timing, shaved heads, toe-to-heel, and constant fatigue? That Great Lakes?!"

Because of this challenging, even gruelling experience, your image of the "Lakes" may not be the fondest. Yet there is much more to Great Lakes than Boot Camp. The facilities and services on base and the surrounding area offer such a wide variety of activities that Great Lakes surely has a lot to offer.

Great Lakes is on Lake Michigan, 18 miles south of the Wisconsin state line and less than an hour's drive from either Milwaukee or Chicago.

Since its inception, the "Lakes" has had the distinction of being the most prolific supplier of trained talent to the fleet. As the largest naval training center in the world, the base has produced more than 3 million graduates, including—each year—more than 30,000 recruits and 26,000 students of the Service Schools Command.

Living conditions at service schools are superior for trainees and instructors at the "Lakes," with some of the newest BEQs in the Navy.

While attached to one of the 20 commands, Navy personnel have a great opportunity to work on an advanced degree through the Navy Campus for Achievement (NCFA) program. Several late afternoon and evening courses are offered on base by College of Lake County, Roosevelt University, and Southern Illinois University. Within driving distance are Northwestern University in Evanston, Pepperdine University, the University of Wisconsin-Parkside, and several others.

One of the first contacts made by arriving personnel is with the housing office staff.

The Director of the Housing Department and a veteran of 17 years at Great Lakes, A. L. Bradley, notes, "We understand the trauma of moving and have empathy with our customers."

Bradley supervises more than 2,200 housing assets on over 500 acres of land (including 150 mobile home spaces). That exceeds one-third of the area of the base. The housing

ranges from two-bedroom, multiple dwelling apartments to four-bedroom, brick, split levels.

Although some housing is as old as 25 years, extensive remodeling is an ongoing process. Says Public Works Executive Officer, Commander J. A. Westcott, "Our program is bringing the older buildings up to the standards of our new housing. We've done a pretty good job so far."

As might be expected, there is a waiting list for housing, though it isn't as bad as some other bases. To help offset this problem, the Housing Referral Office, also under Bradley's direction, coordinates more than 12,000 units of property with area real estate agents.

Undoubtedly, even before settling in, the Navy Exchange (NEX) will be one's first stop. The main exchange is the fourth largest in the continental United States, and ranks seventh worldwide. Profits in 1976 totaled $1.8 million, a large portion of which is funneled into the base consolidated welfare and recreation fund. Other exchange services include a uniform shop, optical shop, personalized services center and check-cashing windows.

With the great success the Exchange has had serving its clientele, plans are now being made to build an even larger main exchange, to open by late 1980.

The lament, "there's nothing to do here, so I'll just sit," is far from applicable at Great Lakes.

The challenge here is in which of the many activities should one participate.

Intramural sports constitute the largest part of Special Services activities; competition includes softball, golf and basketball. Constitution Field, recreation area on Mainside (or the main base), has several ball diamonds and an adjacent horseshoe pitching rectangle.

Nearby are two buildings for gymnastics, boxing, indoor tennis, and racquetball. There are even facilities for judo and karate along with a sauna.

Within the confines of Mainside lies perhaps the most pleasant surprise on the base—excellent boating facilities. Slips can be rented for power craft and sailboats alike. Special Services has a "fleet" of 41 craft for hire, anything from a 14-foot Sunfish to a 22-foot Catalina, or even the pride of the fleet, the 36-footer, "Stormy."

There are two pools on base, one of which is indoors, for all-weather use, though perhaps the largest indoor participation sport is bowling. The base has two smaller lanes, and a new 32-lane house, which sports a billiard parlor.

The competitive aspect of recreation is not the only thing stressed through Special Services at the "Lakes." Recently moved to Camp Barry is the Arts and Crafts Center, where talents in ceramics, lapidary, candlemaking, leather tooling and copper finishing can be developed.

Nearby are the do-it-yourself areas for ham radio enthusiasts or woodworking hobbyists.

For the car buff, there is a 30-stall service building in the Forrestal Village housing area.

There is also a flying club, with access to two planes at Waukegan airport; a rod-and-gun club; and a teen club.

Special Services excels in services, too. From the recreation gear locker, roller skates, fishing gear, cross-country skis and other sports equipment can be checked out. Special Services coordinates off-base tours to such places as the Holland, Mich., Tulip Festival in May and excursions to Milwaukee and Chicago.

One other welcome and essential service performed by Special Services is the Child Care Center. The supervisors are proud of their programs for infants, pre-schoolers and early school-age chldren.

Chicago, with the Museum of Science and Industry, the Cubs and the Bears, is just a 40-minute drive from the "Lakes."

Or, there's Milwaukee with the Brewers, Bucks, German food and, of course, beer.

Waukegan, the largest city in Lake County, is a good fishing port and combines industry with the beauty of city parks. Also nearby is the fascinating Great America, a family-theme park with discount tickets available at Special Services.

For more nature-filled recreation, there's the Chain of Lakes State Park, about 25 miles northwest, or the Illinois Beach State Park, just north of Waukegan.

Dental Technician 2nd Class Frank Bruton, fresh from his last station in San Diego, described his new surroundings at the "Lakes"; "My last duty station was nice, but . . . the change of seasons, the beauty of the Lake, and the challenge of my new job make this tour an exciting prospect." ⚓

Bearings

Mechanical Eyeball

The human eyeball is probably the most important single system in any Navy aircraft.

In spite of all the sophisticated systems available to them, the pilots dodging SAM missiles over Vietnam soon learned they could usually outmaneuver the missiles they could see. It was the SAM they couldn't see that hurt. The crew of any Search and Rescue aircraft can attest to the importance of good visibility, also, so can the individuals who have been rescued.

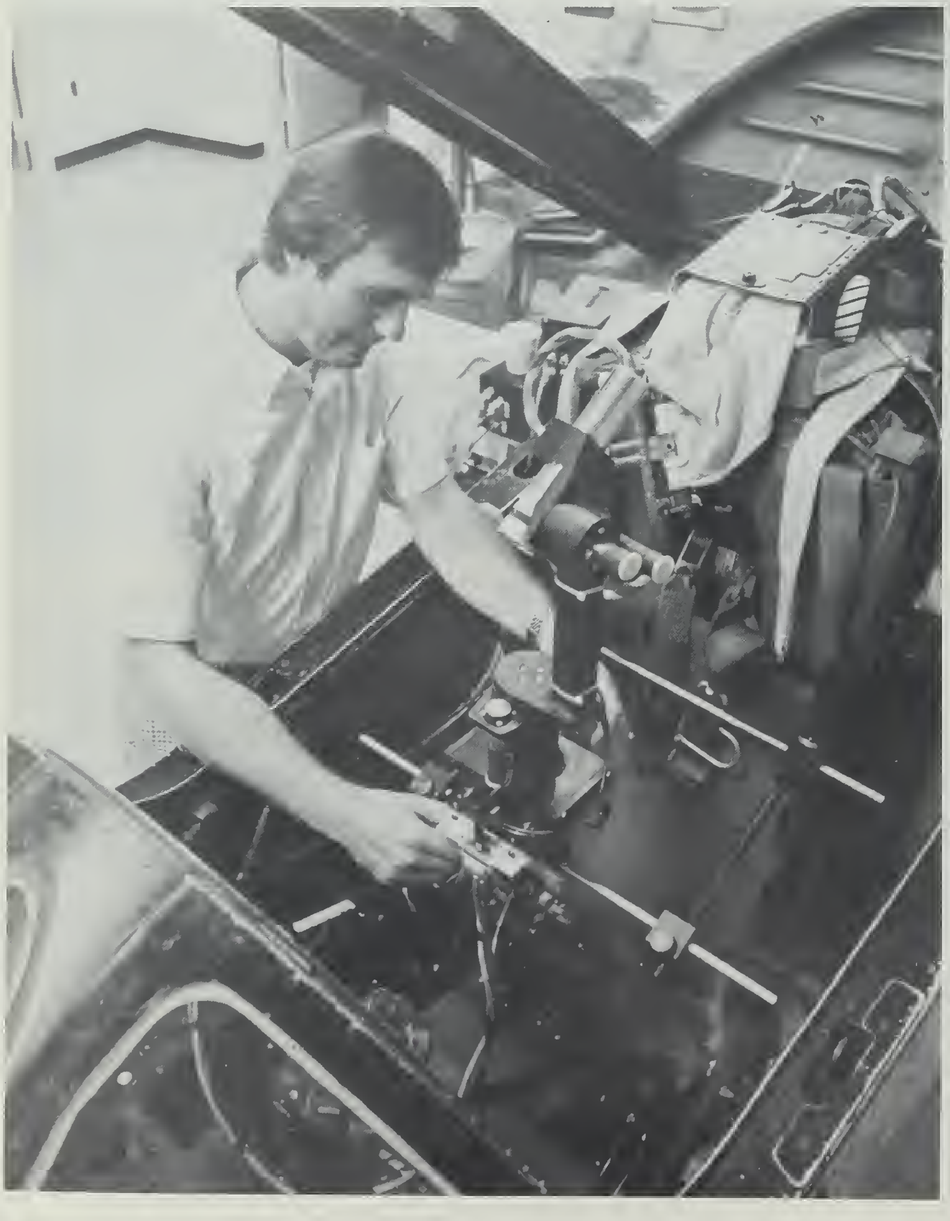
The Naval Air Test Center at Patuxent River, Md., recognizes that clear, constant visibility for the crew is extremely important in any aircraft design, so Pax River engineers have developed a unique instrument to evaluate just how much visibility any aircraft offers its crew.

It's called FOVEA, Field of View Evaluation Apparatus. A relatively simple device, FOVEA consists of a television monitor, table-top computer and an XY plotter. Just as important, FOVEA's small size, portability and low cost make it a very important and cost-effective addition to the test and evaluation capabilities of the Naval Air Test Center.

Basically, FOVEA is a television camera mounted on an adjustable rack which can be mounted in any crew-position on any type of aircraft. The camera is then adjusted to the exact "design eye position" and programmed to provide information on just how well the crewmember can see.

As the camera sweeps around the cockpit windshields, it records any interior or exterior obstruction which hinders the pilot's view. The obstruction might be an instrument placed on top of the instrument panel, or the refueling probe extending out from the aircraft, or even the aircraft's nose.

Once the XY plot is completed, it serves as an aircrewman's field of view "fingerprint" of that aircraft. This quantitative data, along with the subjective data gathered from crewmembers, becomes a base for evaluating all future work on the aircraft which might affect the crew's external vision.



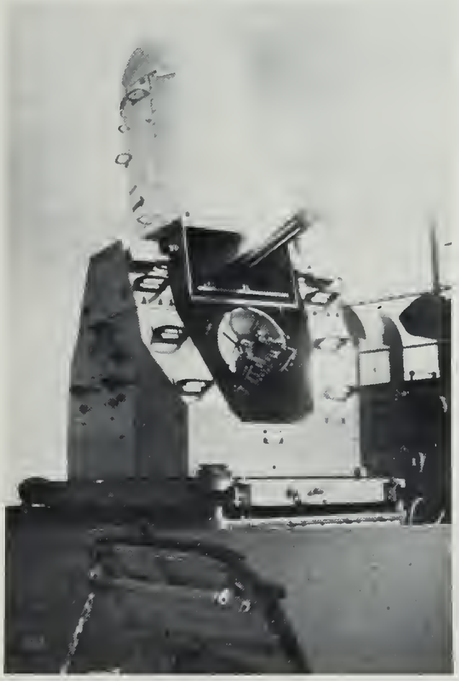
3,000 a Minute

The *Phalanx* radar-controlled, close-in missile defense system was successfully tested aboard USS *Bigelow* (DD 942), and approved for service in the fleet by the Chief of Naval Operations in late August.

Phalanx incorporates an automatic

Gatling gun and self-contained radar system. It is designed as a last line of defense against antiship missiles and fires 3,000 rounds a minute. *Phalanx* has completed technical and operational evaluations which tested its accuracy and reliability.

During evaluations, *Phalanx* consistently exceeded performance standards set for the system, and in one test measuring reliability, it registered four times the needed score. In another test measuring accuracy, *Phalanx* engaged 35 out of 35 test targets.



Phalanx's major technical achievement is a closed-loop radar spotting system which simultaneously calculates the location of both the threatening platform and its projectile. With this information locked in, *Phalanx* automatically directs a stream of projectiles throughout its firing burst onto the enemy targets.

It is expected that *Phalanx* will be delivered to the fleet in 1979.

Anchors Awry?

USS *Tattnall* (DDG 19) recently lent a helping hand to two neighbors in distress while moored in Ville-Franche, France.

The Officer of the Deck, Chief Gunner's Mate Richard Engel, was the first to sight a 110-foot yacht drifting toward *Tattnall*. The *Welsh Liberty,* a pleasure yacht from Cardiff, Wales, was dragging anchor and inching steadily toward *Tattnall*. Engel learned from *Welsh Liberty's* captain that she couldn't reset her anchor because of a broken winch.

Lines were attached and *Welsh Liberty* was brought alongside. Then, Senior Chief Machinist's Mate Ira Howell, Machinist's Mate 2nd Class Charles Jarvis, Chief Boatswain's Mate Stanley Gains and Chief Master at Arms James Jones repaired *Welsh Liberty's* anchor winch by jury rigging a patch of leather around the winch's brakeshoe and adding plenty of "elbow grease."

When the yacht had reanchored, Tattnall's Chief Petty Officers' Mess hosted *Welsh Liberty's* crew for lunch. In turn, Commander Thomas Head, *Tattnall's* commanding officer, accepted an invitation for dinner aboard *Welsh Liberty*.

But that was hardly the end of *Tattnal's* "helping hand" program—the next day a distress signal was heard from *Conqueror,* also a Welsh pleasure yacht. Anchor trouble again, *Conqueror's* anchor had become entangled in chains from the buoy to which *Tattnall* was moored. As the wind blew *Tattnall* around on its mooring, the ship moved slowly but steadily toward *Conqueror*.

Once again the alarm was sounded and *Conqueror* was pulled alongside. This time, repair work was accomplished by *Tattnall's* hull technicians, who cut the yacht's anchor free.

Later, 15 children and their parents from *Conqueror* were given a tour of *Tattnall*. When *Conqueror* got underway later that day, many smiles, waves and friendly words passed between the rails of both ships.

While enjoying a stop on the French Riviera, *Tattnall* was ready, willing and able to lend a helping hand.

Bearings

Three-Time Winner

For the third consecutive year, Naval Air Station Alameda, Calif., has won the Self-Help Bronze Hammer Award. The award is presented annually to those commands working to improve the quality of Navy life through Self-Help.

Construction Battalion Unit 416 (CBU 416) provided the technical expertise and supervision. The station's Self-Help division provided a portion of the manpower during the past years on such projects as a picnic area shelter, fishing pier, parking lot security tower, renovation of the enlisted club and theater, and improvements to barracks.

In conjunction with the air station's new Fleet Recreation Center, CBU 416 and Self-Help graded playing fields, installed a sprinkler system, erected backstops, paved tennis and basketball courts and completed extensive landscaping.

Although it's nice to receive a pat on the back for a job well done, CBU 416 and Self-Help personnel are not resting on their laurels. The rumble of heavy equipment, pounding of hammers and clanking of pipes continues as the program moves on to other projects.

Nightmare Ended

It was after midnight. When one of the cars in a caravan of friends traveling from Gardena, Calif., to San Diego developed mechanical problems, they all pulled over into the safety lane of the freeway to help.

Mrs. Merrilee Kjar stopped her station wagon, put on the emergency flashers, and leaving her seven-year-old son Michael sleeping in the back, went over to find out how long the repairs would take.

Then with almost nightmarish slowness, another car crashed into the back of the station wagon. The vehicle burst into flames immediately.

Mrs. Kjar ran back and tried desperately to free the trapped child. Senior Chief Engineman James L. Brotemarkle assigned to Assault craft Unit 1, Naval Amphibious Base Coronado, Calif., and Aviation Antisubmarine Warfare Operator 1st Class Leslie J. Johnson, Air Antisubmarine Squadron 38 at San Diego, came to her aid.

They pushed the mother out of harm's way, then seconds before the automobile's gas tank exploded, Johnson reached in and pulled young Michael from the flames, burning his own hands and right foot in the process.

A year later, Michael, who received third degree burns over 45 percent of his body, was recovered enough to watch his rescuers receive the Navy and Marine Corps medal for " . . . courageous and prompt actions in the face of great personal risk. . ."

Louisville Is O.K.

A surprise July inspection of a new training system at the Naval and Marine Corps Reserve Center (N&MCRC), Louisville, Ky., resulted in a "well done and congratulations" to the reserve community from the Chief of Naval Reserve Vice Admiral Pierre Charbonnet.

The system, approved on a one-year pilot basis for the Naval Reserve Readiness Command Region Nine headquartered in Memphis, Tenn., places a strong emphasis upon individual ratings and functional team training. N&MCRC Commanding Officer Lieutenant Commander J. A. Franklin operates the system similar to a fleet training center. Commanding officers of all units drilling on a particular weekend provide trainees to rating group classes and functional team evolutions for professional development and general military training.

Despite the adjustments required in a training program of this size, Franklin said, "The system is working well and accomplishing what it is designed to do—provide trained reservists to supplement the active naval forces in time of emergency."

VADM Charbonnet obviously agreed when he sent a message to the center which said, "If Louisville were a seagoing command, we could, without reservation, state, 'They've got their ship together'."

Gilmore Remembers

Combining a port visit to the French Riviera with ceremonies honoring World War II veterans, the submarine tender USS *Howard W. Gilmore* (AS 16) recently visited Theoule-Sur-Mer at the invitation of the French government.

Gilmore, commanded by Captain Dean R. Sackett Jr., and homeported in La Maddalena, Sardinia, represented the U.S. Navy in honoring the World War II landing in France of the 36th Infantry Division. The division, aided by Allied naval forces and the French Resistance movement, landed in August 1944 at Le Dramont during Operation Dragoon.

Two ceremonies actually took place—a wreath was placed at the Theoule War Memorial, and *Gilmore* and the French support ship *Rhin* (A 621) took part in a wreath ceremony at sea.

Aboard ship, Capt. Sackett said, "The platform this day is not just for the casting of a wreath upon the waters in memory of our valiant dead, but is a visible reminder of perseverance and vigilance—a challenge that we are bound to keep."

While a rifle salute rang through the air, Capt. Sackett and the mayor of Theoule-Sur-Mur cast a wreath into the sea in memory of the men who died on the beaches of France 33 years ago.

Continuous Training

A few months ago, the U.S., along with several other nations and with appropriate air and surface ship support, landed over 5,000 Marines from four NATO nations on a beach in Turkey. In the Ionian Sea southeast of Italy, a carrier strike force including American and Italian forces, battled against a variety of sea, air and land threats, while across the globe, in the Northern Marianas, a Navy and Marine Corps amphibious assault team invaded the island of Tinian.

Meanwhile back on the homefront, the Second Fleet trained off the East Coast with a Royal Navy task group. On the West Coast, the Third Fleet, with Canadian support, held anti-submarine, anti-air and electronic warfare and surface gunnery exercises.

Don't worry, it's not World War III. These exercises were just a few of the many the Navy participates in each year to develop fleet tactics and provide continuous training.

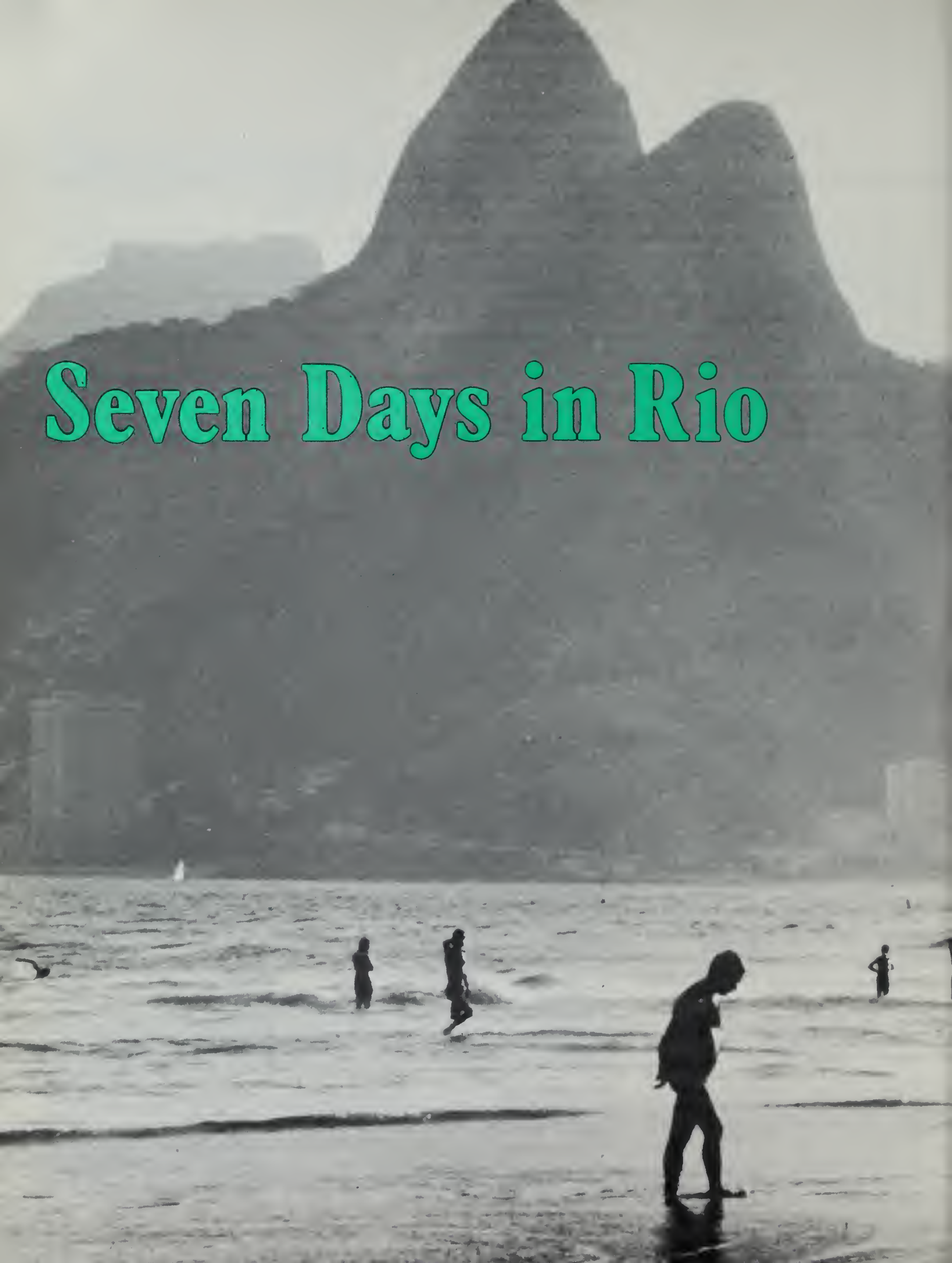
The amphibious exercise in Turkey was **Display Determination 77**, involving air, land and naval forces from the U.S., Italy, Greece, Portugal, Turkey and the United Kingdom. The operation, held each fall, not only provides important training, but also demonstrates NATO solidarity and the ability to defend and reinforce the southern flank of Europe.

Nearly 30 vessels from the U.S. and Italian Navy participated in **National Week XXIII** in the Ionian Sea. The week-long naval maneuvers, covering more than 25,000 square miles, were designed to test the ability of a carrier striking force to conduct offensive operations while dealing with a variety of enemy surface, subsurface and air threats.

The mini-invasion of Tinian was part of another exercise—**Quick Jab X**. The team tested the Quick Jab concept of a rapid assault on an objective to destroy its usefulness to an enemy. For example, if an enemy had a radar or missile site that prohibited a large-scale attack, a Quick Jab team could come in to neutralize the site.

On the East Coast, twenty Atlantic Fleet ships, several aviation units and a Royal Navy task group conducted the last in a series of six combat readiness exercises labeled **COMPTUEX 77** (Composite Training Unit Exercise). A similar exercise, held on the West Coast and called **Varsity Sprint**, involved Third Fleet and Canadian ships. ⚓

Seven Days in Rio

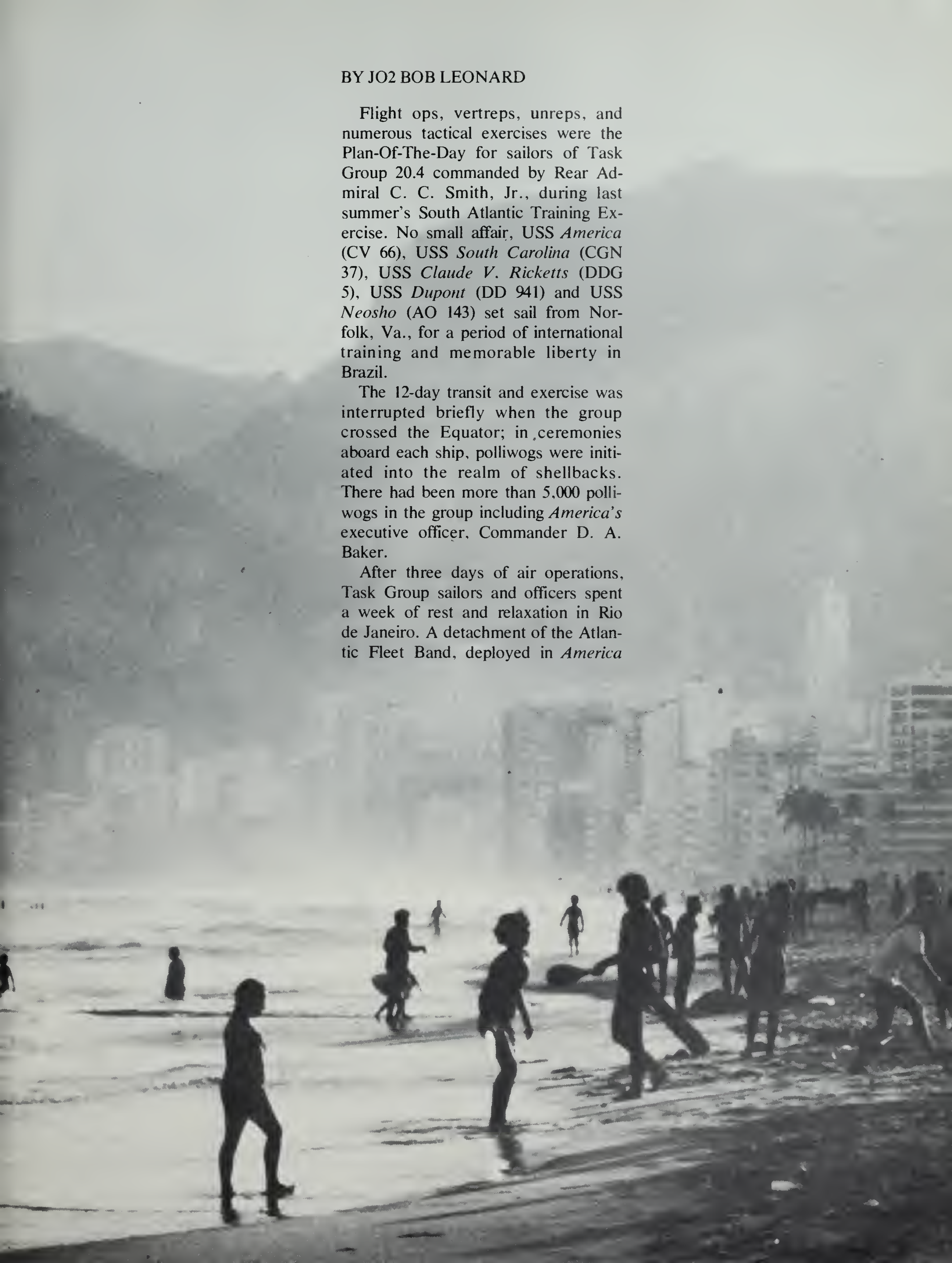


BY JO2 BOB LEONARD

Flight ops, vertreps, unreps, and numerous tactical exercises were the Plan-Of-The-Day for sailors of Task Group 20.4 commanded by Rear Admiral C. C. Smith, Jr., during last summer's South Atlantic Training Exercise. No small affair, USS *America* (CV 66), USS *South Carolina* (CGN 37), USS *Claude V. Ricketts* (DDG 5), USS *Dupont* (DD 941) and USS *Neosho* (AO 143) set sail from Norfolk, Va., for a period of international training and memorable liberty in Brazil.

The 12-day transit and exercise was interrupted briefly when the group crossed the Equator; in ceremonies aboard each ship, polliwogs were initiated into the realm of shellbacks. There had been more than 5,000 polliwogs in the group including *America's* executive officer, Commander D. A. Baker.

After three days of air operations, Task Group sailors and officers spent a week of rest and relaxation in Rio de Janeiro. A detachment of the Atlantic Fleet Band, deployed in *America*



and directed by Lieutenant John D. Fluck, proved to be an excellent goodwill tool, playing many concerts in the Brazilian cities of Salvador and Rio.

The Fourth of July was celebrated with an Open House on *America*, with some 1,000 local guests aboard for the traditional American picnic of hot dogs and hamburgers. Later, American residents of Rio hosted the sailors to an evening on the beach complete with fireworks.

Liberty over—now back to work and four days of operations with the Brazilian Navy. Intensive at-sea drills with three Brazilian destroyers and two Brazilian submarines were conducted in antisubmarine warfare.

Some forty top-ranking Brazilian Air Force and Navy commanders observed the joint exercieses, including Admiral R. S. Espellet, Commander of Naval Operations and Lieutenant General R. A. Carrao, Commander Tactical Air Command of Brazil.

After the exercises were completed and the United States ships were on their way home, the Task Group Commander, RADM Smith, put out a message to all hands which stated, "In my experience, never has a group this large conducted themselves so properly in an overseas port."

While most of us dream of Sugarloaf, Copacabana Beach, Ipanema, and the other wondrous things to see in Rio de Janeiro, the sailors of TG 20.4 can say, "I was there!" ⚓

Sailing the Sargasso

BY DR. JOHN W. FOERSTER

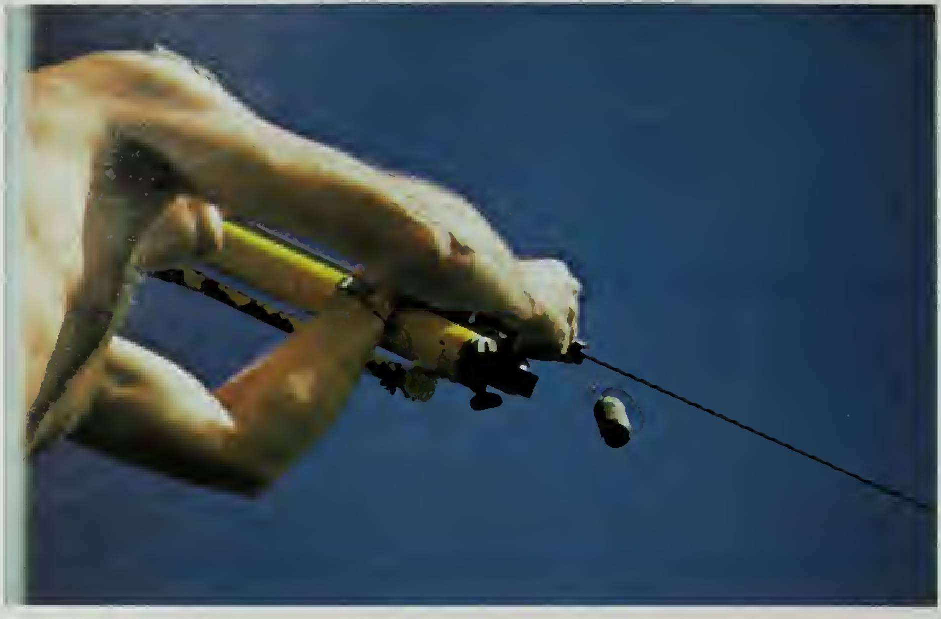
Many Navy people have sailed for pleasure. Few, though, have experienced the conditions of "grandfather maritime" on long sea voyages—a feat diluted by the seas of time.

As an oceanographer, however, I took a research cruise closely approximating those conditions; I was Chief Scientist aboard the research vessel *Westward*.

A 125-foot stay-sail schooner with auxiliary diesel power supplementing 7,000 square feet of sail on twin masts, *Westward* is basically a quiet ship—an oceanographer's dream vessel. We were not to benefit from bow thrusters or cycloidal propellers to maintain our station. Instead, we had to schedule sampling activities to suit sail adjustments and underway "steaming" conditions.

Watered, bunkered with fuel, food stowed, and armed with technical equipment, we set sail. With less than 24 hours at sea, the wind backed to the Northeast, the seas rose and we came abreast a force "9" gale—a genuine nor'easter that lasted two days. *Westward* was set to the wind and her sails down hauled with only the mainsail reefed for stability.

Roll increased as pitch magnified. All hands held on—some unsuccessfully to their meals—and many tried to keep their equilibrium by clinging tenaciously to memories of wild roller-coaster rides. Eventually, though, the seas did settle as the wind moved to the western quarter. The jib topsails and fisherman were hoisted aloft while the mainsail was unreefed. We altered course for a diagonal trek across the Sargasso Sea.



Lab facilities, sleeping quarters and messing areas were cramped—each mile left us with an increasing admiration for "Old Navy" tars. Under way across the Sargasso Sea, we expended bathythermographs to obtain temperature profiles, collected plankton with high speed tows, and took water samples to test for salinity and nutrients.

Daily regimen was broken by a short liberty in Bermuda; then we headed south out of the westerlies, across the horse lattitudes and into the tradewinds. Each day the rising temperatures made life below decks less bearable. Once palatable food became less appetizing though the cook labored untiringly in the hell heat of the galley.

Sailing westward along the 22 degree latitude line, we celebrated the nation's 201st birthday with food and song—some salt-water showered for the event while others took a four-knot scrubbing in the bosun's chair.

Sixteen days after setting sail, our voyage ended at Woods Hole, Mass.—we had covered 3,000 miles with only a few hundred under diesel power.(→)

We had experienced the sea as had the first oceanographers. We knew the heat of the tropics, the gales of temperate latitudes, the problems of taking hydrostations, the "how-toş" of taking a fix with a sextant and maneuvering through passing squalls in the trades.

Now, each of us treasured some secrets of survival perfected by old salts but rediscovered by ourselves. Bolstered with better understanding, I look forward to my next oceanographic cruise—on another motor sailer. ⚓

Sargasso Sea

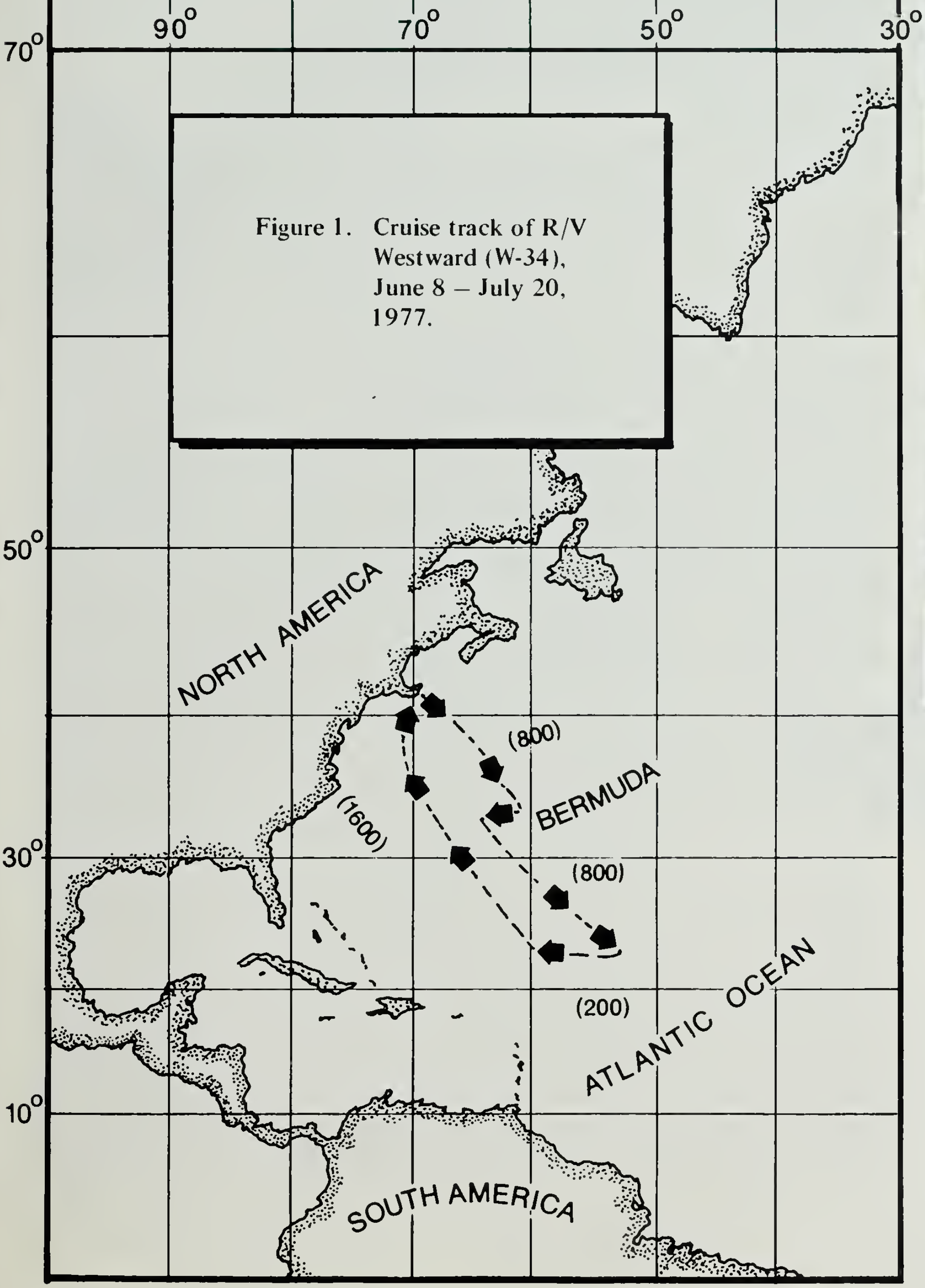


Figure 1. Cruise track of R/V Westward (W-34), June 8 – July 20, 1977.

The author, John W. Foerster, holds a doctorate in marine science from the University of Connecticut. He teaches in the Oceanography Department at the Naval Academy, instructing in general, biological and chemical oceanography and supervising the department's lab and oceanographic vessel.

He has been employed by the David Taylor Ship Research and Development Center, working on antifouling compounds in the center's environment and fire-fighting section.

This past summer, he was chief scientist aboard R/V *Westward,* operated by the SEA Education Association and the Office of Naval Research. This was the first time diagonal tracsects south of Bermuda had been accomplished in connection with a study of temperature profiles and plankton distribution across the Sargasso Sea.

Grains of Salt

Perry reopens trade with Japan

By LT Tom Davis

Thousands of astonished, yet curious people—inhabitants of a tiny island nation which had ignored the world and its progress for more than 200 years—lined the shore and watched as an American naval officer ordered four ships to anchor in Tokyo Bay on the afternoon of July 8, 1853. Commodore Matthew C. Perry, commanding a squadron of two steam-powered men-of-war and two sailing frigates, had arrived to reopen trade with the Empire of Japan.

No sooner had the anchors been dropped than two cannons were fired from a nearby fort, signaling the general alarm as they had done many times during 215 years of complete isolationism.

No foreigners could enter the country legally. No foreign vessels were allowed to call at a Japanese port or land people on her coast. No Japanese subjects could leave Japan. Even Japanese seamen, unfortunate enough to be shipwrecked on a foreign shore, could not return for fear they would spread foreign ideology. Consequently, the Industrial Revolution had not reached the empire and, as late as 1850, steam engines, factories, telegraph lines, modern firearms and large ships were unknown to the island populace.

Many attempts had been made by European nations to open trade with Japan but all had failed, as did early American attempts. The most significant American effort before Perry's was made in 1846 by Commodore James Biddle. He, however, made the mistake of becoming too familiar and friendly and so "lost face" with the Japanese who ordered him never to return.

The next American officer to visit Japan was Commander James Glynn in 1849. His mission was to return to the United States 15 shipwrecked American seamen who were being detained on the island. Behaving quite unlike Biddle, he sailed his ship straight through a cordon of Japanese guard boats.

Glynn threatened to begin shelling Nagasaki—the port city holding the sailors—if the Japanese did not immediately release their captives. The confused Japanese, not expecting threats of violence from Americans after their experience with Biddle, quickly delivered their prisoners and Glynn departed.

Once back in the states, Glynn reported to the Navy Department that the time was ripe for a serious American attempt to open Japan. Secretary of the Navy W. A. Graham selected Commodore Perry, the younger brother of Oliver Hazard Perry of Lake Erie fame.

Given orders in March 1852, Perry sailed his small fleet into Tokyo Bay in the spring of 1853 and anchored at its mouth. He was soon besieged by Japanese guard boats which tried to send boarders onto the American ships. They were greeted by American pikes and cutlasses and the Japanese gaped in disbelief; such disrespect was unexpected from foreigners. Perry was prepared to avoid the type of behavior that had resulted in the failure of the Biddle mission. He had decided ". . . to demand as a right, and not to solicit as a favor, those acts of courtesy which are due from one civilized country to another. . . ."

After much ceremony and delay, Commodore Perry agreed to receive the governor of Uraga aboard his flagship *Susquehanna.* Arrangements were made for the commodore to deliver a letter from President Millard Filmore to a high-ranking official of the Japanese central government in Tokyo, who was to deliver it personally to the mikado, or emperor.

On July 14, 1853, amid unprecedented pomp and ceremony on both sides, Perry presented the Chief Executive's letter and promised to return the following spring for a reply.

Thank You, Londonderry

Secretary of the Navy Frank Knox, left, leaves the Londonderry Chapel during a World War II tour of the facility.

BY JO1 CHRIS CHRISTENSEN AND RM1 HOMER TREAT

U.S. Naval Communication Station, Londonderry, Northern Ireland, recently lost the battle to technology and closed down. But before the oldest, continuously operated U.S. Navy facility in Europe locked the door, sailors and civilians gathered to reminisce about their common Londonderry experience.

You see, something special had happened at Londonderry. "I'm old enough to remember when the first Americans came to Londonderry at the beginning of World War II," said one resident. "I was a lad of 13 and I was quite frightened of them.

"But time proved that the strangers absorbed our ways. Many of those strangers became husbands of our city girls."

"Husbands of city girls" notwithstanding, the U.S. Navy and the people of Londonderry began a love affair in those early days of World War II that ended when the last sailor left in September.

"I, too, remember when they first came here," said a woman resident. "There was cheering that echoed across the water as the ships anchored. The Doughboys looked so proud and confident as they stepped ashore. They marched very quietly because they were wearing crepe-soled shoes. Oh, it was a grand time, it was."

The woman spoke of that day in World War II and the arrival in Ulster of the first U.S. Expeditionary Force to Europe, Jan. 26, 1942. Nine days later, the U.S. Naval Operating Base, Londonderry was commissioned.

"Of all the military from many countries who passed through or were stationed in Londonderry during World War II, the Americans were the most popular," said another resident. "In

The first contingent of Red Cross nurses to staff the Londonderry Red Cross Club.

the years since the end of the war, the links between the American Navy and the city have been strong and permanent."

During the early days, those strong and permanent links were forged within a shroud of secrecy. Rumors flew round-the-world about a secret American naval base being constructed in Northern Ireland. Those rumors were kept smouldering by the presence of American contractor personnel in Londonderry. Little information leaked out, however. Under that air of secrecy Navy engineers and American contractors were busy chalking up an impressive wartime construction achievement.

"They were hell-raisers when they weren't working," said one Irish old-timer, "But they surely worked the same way they played."

The morning after America's official declaration of war, the 3,000 local workers arrived at work amid a few changes. "It was very shocking," said a former employe. "We arrived the next morning and found most of the civilian contractors—who we thought were civilian contratcors—walking around in U.S. Navy uniforms. And that wasn't all! The vehicles' license plates had been changed from Royal Navy to U.S. Navy."

Military personnel continued to pour into Londonderry. On June 15, 1942, what was believed to be the largest single unit of troops ever to cross the Atlantic landed in Northern Ireland. With it came a contingent of Red Cross nurses to staff the first American Red Cross Club overseas.

Then, with the German occupation of France cutting off the southwestern approaches to Britain, Allied planners saw the need for a larger station to support the upcoming Normandy invasion. In February 1943, a U.S. Navy Seabee Battalion arrived. They expanded the base to include several well-dispersed camps, a hospital, supply depot, ammunition dump, fuel depot and ship repair facilities for Allied ships when the Normandy landings began.

But that successful invasion also marked the beginning of the end of World War II in Europe and, accordingly, the men assigned to Londonderry started to be transferred.

By January 1947, the base was all but decommissioned. Only two U.S. Navy officers and three enlisted men remained. But only just. They had shipped their personal effects and were booked on an evening flight when they learned the base at Londonderry had been granted a reprieve. It was to be reopened as a communication facility.

The facility played an ever increasing and expanding role in communications throughout the 1950s. The base provided high frequency radio support to the U.S. Navy, NATO fleets and U.S. merchant ships in the eastern and northern Atlantic. On July 19, 1961, the growing responsibilitity resulted in the facility's upgrading to U.S. Naval Communication Station Londonderry.

Growth continued through the ‘60s resulting in the Londonderry site becoming one of the most modern communication stations in Europe.

Then, in the mid-'70s, technological advances in communications such as the use of satellites, spelled the final end for Londonderry. A decision was made to incorporate the communication capabilities of the Naval Communications Unit in Thurso, Scotland, with those of Londonderry. The site at Thurso was chosen for the purpose which predestined the end of Navy presence in Ireland.

It was sad news for the people of Londonderry. "The Americans in Derry reminded people that NATO has not been just a far-off name," said a local editor. "A unique and historic tie between the United States and Northern Ireland has been severed."

It was sad news, too, for the sailors of Londonderry. "Of course it is not a pleasant task to close a base," said Captain Thomas McKeown, the last commanding officer. "But I was grateful to the Navy for selecting me to be the one to administer, with the utmost care, the final details required to withdraw the Navy from a community it loves so well."

In December 1976, the base held the last Christmas party for the local children. It bore all the similarities to the first one held in 1942. Also, the Navy hosted the annual Saint Patrick's night dance and, on May 27, held a formal dance to commemorate the association of Americans with the city.

The next day saw the opening of the Londonderry Civic Week Festival. A parade wound through streets lined with cheering spectators and led by the Navy's Sixth Fleet Band from Naples. They were followed by a Navy float that proclaimed, "Thank you, Londonderry, for Thirty-four years of Friendship." Dependent children riding the float threw some 5,000 pens imprinted with the theme slogan to the spectators.

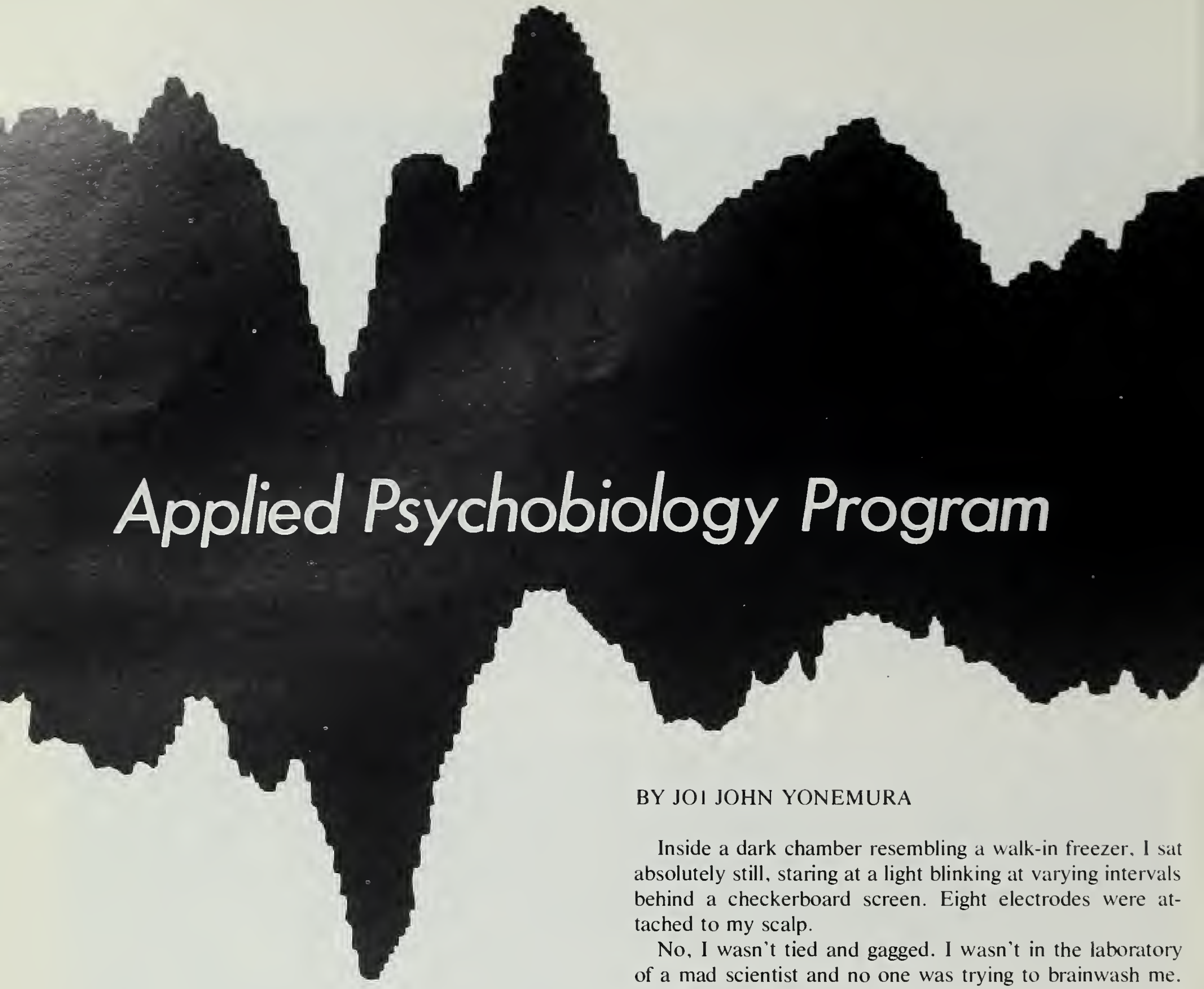
Then it was time to wrap it all up. Part of those final details included the decommissioning ceremony, held almost two months before the official closure date because, "If we had waited until the final day, it would not have been fair to our people nor to the city," Captain McKeown said. "A proper ceremony in tribute to the history of this base and its closeness to the city could not have been put together with only a handful of people on the last day."

At the decommissioning ceremony, Councillor Hugh Doherty, Mayor of Londonderry, noted something special, indeed, had happened at Londonderry:

"I believe it is a fitting tribute to all the Americans to say that any American can go anywhere in this town and feel welcome.

"There is no substitute, I repeat, no substitute for the friendship as shown by you Americans." ⚓

Members of the ComSixthFlt Band perform for Londonderry residents.



Applied Psychobiology Program

BRAIN WAVE RESEARCH

BY JO1 JOHN YONEMURA

Inside a dark chamber resembling a walk-in freezer, I sat absolutely still, staring at a light blinking at varying intervals behind a checkerboard screen. Eight electrodes were attached to my scalp.

No, I wasn't tied and gagged. I wasn't in the laboratory of a mad scientist and no one was trying to brainwash me. I was at the Naval Training Center, San Diego; I had volunteered to have my brain waves measured.

Brain waves measured? At NTC?

The Navy, in its never-ending quest to update and improve training, is researching new methods of measuring and enhancing learning ability. The Navy Personnel Research and Development Center (NPRDC), at Point Loma near NTC, is conducting this research in what it calls the Applied Psychobiology Program (APP).

It's literally a mind-boggling idea. Why is this important to the Navy? Because current projections show that more than half of all personnel entering the Navy in 1976 will not complete their first full enlistment or be recommended for another. There is especially a shortage of personnel who

can be trained in such jobs as antisubmarine warfare.

This program may alleviate the problem in the future by helping to route propective trainees into the kinds of training that suits them best.

According to Dr. Bernard Rimland, director of APP, there has been a gap in the field of personnel psychology. Advances in biology, electronics, computer science, neurophysiology, and the like, were not being applied to personnel problems. Those in the medical profession were doing some brain wave research, but largely to solve medical problems, not personnel problems.

"Little work was being done toward adapting technology to enhance productivity of 'normal' people," he said. In this area of "underlap," APP is trying to determine if space-age technology can be applied to psychology in order to enhance a person's performance, or his learning ability.

"With the all-volunteer force and the reduction in number of people available, the Navy has to take the people that come to us and we must find a way to make use of these individuals' potentials," said Dr. Rimland.

But what about all the written aptitude tests recruits take before entering the Navy and, again, while in boot camp?

"The idea is not to replace paper-and-pencil tests, but to supplement them," Dr. Rimland explained. "Aptitude tests do quite a good job of predicting how well people can learn in a classroom situation. That's what they were designed to do. But they don't do a very good job of determining which people can operate complicated equipment, which people can become good sonarmen, or do other jobs in the real world as opposed to the academic world."

As I sat in the soundproof booth watching the flashing light, my brain reacted to the visual stimulus, and its electrical impulses were recorded in the combination computer-electroencephalograph (EEG). This is the simplest task performed while being tested. My brain merely acknowledged the signal sent to it from my eyes.

Another test uses sounds (clicks) to measure the brain's response to auditory stimuli. Later, more complex tasks will be performed as brain waves are measured; reading, for example, or solving a math problem.

"There are certain measurements you can make on an engine as it idles," said Dr. Rimland, "but there are some things you can't really find out unless you also measure while it functions at peak performance."

But at this point, the research is just getting off the ground. It's much too early to tell how successful these methods will be—there is still an enormous number of variables that must be investigated that could be crucially important. For instance, how long should the test period be in order to be effective? What types of stimuli would produce the most significant data? How should different parts of each brain wave be measured? There are many of these complex parameters that must be considered.

APP was established in 1975 and, to date, several hundred Navy recruits have voluntarily had their brain waves measured. Those recruits who do volunteer are given a Privacy Act statement and an explanation of the project. If they still have no objections, they sign a consent form and undergo the test.

Okay, the brain waves are measured. Then what?

Right now, all the information is put into the computer's memory bank. In this case, it consists of floppy, record-like disks which can be easily stored. Later, researchers will check the progress of each person. How well did he do in boot camp? What rating is he in? How well is he performing?

By comparing "success" levels in various ratings and cross-checking with their initial brain wave patterns, groupings can be made. Those who excel in a specific rating may have had unique brain wave patterns, and if so, new recruits with the same characteristic brain waves could be encouraged in that direction.

If you naturally have an aptitude for a specific job, and get it as your Navy rate, just think how much greater your job satisfaction would be.

But this is still in the future. Now, emphasis is on assisting recruits who have reading problems and are, therefore, slow learners. These persons *can* be identified by brain wave measurement in many instances. Remedial reading programs can then be individually geared to the specific learning problem of the subject.

"We are investigating the possibility that different teaching techniques will enhance learning ability," stated Dr. Rimland. "Some people who can't read well may require a different type of reading training than the type which works fine for the majority.

"Some of us learn best from the 'phonics' method, where you sound out the words," he explained. "This puts emphasis on the hearing apparatus and the parts of the brain that analyze sound. If a person has a defect in his auditory analytical ability, he may not be able to learn to read using this phonic method. He may—on the other hand—be able to learn using the 'look-say' technique, which uses his visual analytical ability.

"We are initiating a project to study diagnostic use of brain waves in order to see through which channel a remedial reading person should be taught."

Another APP problem concerns attention span. Sometimes we cannot concentrate very well. Our minds wander. An apparatus developed by Dr. Karel Montor at the U.S. Naval Academy, monitors brain waves and tells the researcher when a person's attention is changing.

Let's face it, boredom affects us all. When it sets in, our minds tend to substitute more interesting thoughts. This can be detrimental to job productivity, but more importantly, in some jobs a lapse in concentration can lead to disaster.

What can be done about it? When a sonarman, as an example, is being tested, and he begins to think about his girl friend or what he is going to have for lunch, his brain waves will show deviations from the pattern established when he was concentrating solely on the sonar screen. At this point, he can be alerted that he is not paying proper attention. He could train himself to concentrate.

"If it turns out that people can be trained to concentrate not only while using the new 'alertness' device, but at other times as well, one's entire learning capacity might be upgraded," observed Dr. Rimland.

The Navy is by no means the only organization experimenting in this field. A number of other laboratories around the world are conducting research in psychobiology, notably the New York Medical College and Langley Porter Neuropsychiatric Research Institute at the University of California Medical Center in San Francisco.

NPRDC has a special advantage in this research because of its proximity to NTC San Diego and the Marine Corps Recruit Depot. Not only is the center able to obtain volunteers, it is able "to follow up on the individuals tested to determine whether they were successful in boot camp and advanced technical training; are considered proficient by their supervisors; are advanced to higher pay grades; manage to remain in the Navy for the full term of their enlistment; and are declared eligible for reenlistment."

In the civilian community, it has proven difficult to keep track of subjects.

Actually, the eight electrodes used for the tests are held in place, four on each side of the head, by a lycra helmet. The computer records and calculates the brain wave signals; in a matter of seconds, it gives the researcher an accurate readout of the intensity of electrical impulse at each electrode. The difference in voltage between electrodes, the delay from onset of stimulus to reaction by the brain and the voltage, changes between flashes or clicks or whatever the stimulus.

It takes these measurements from both sides of the brain and records the interaction.

"It's difficult to accurately characterize the difference between the left and right hemispheres of the brain, said

Dr. Rimland. "The left hemisphere in most right-handed people (lefties are usually the opposite)—processes information in a sequential, rational or logical manner. Solving a math problem, for example, would make primary use of the left hemisphere. A lawyer stringing words and thoughts together leading to a logical conclusion also would be using his left hemisphere. The right side, in most right-handed people, is the minor hemisphere—this processes information as a whole, permitting us to subjectively appraise a situation. For instance, a quarterback in a very tight situation has to sense things visually and simultaneously—how many men are rushing him, are his receivers covered, etc.—and then make an instantaneous decision.

"Of course, the right and left hemispheres work together," the doctor continued, "but the right one seems to specialize in the more ill-defined situations. School learning is of the left hemisphere sort; lectures, textbooks, movies, all are presented in a linear, logical progression."

I have to admit I was a little bit nervous as Dr. Greg Lewis, an expert in psychobiology, and Jeff Froning, a graduate student at San Diego State University who works with Dr. Rimland, attached the electrodes to my head. I had visions of the computer reading my thoughts and projecting me into George Orwell's *1984*.

What about that? Is this project leading to the point when machines will dictate our way of life?

"Right now we need help and we're trying to learn what help technology can provide us," Dr. Rimland stated. "There's some pretty powerful, new technology around and if we experiment with it in relation to our problems, we hope to learn some things which, in a few years, will prove to be useful.

"We are a long, long way from the point where machines will be anywhere near technically advanced enough to offer any kind of threat. There is nothing inherently dangerous in what we're doing. People tend to be afraid of what they don't understand, so some people are uneasy about psychobiology.

"Some may think we should stop doing brain research. Man is still vague, after many centuries, about his brain. Though our main emphasis right now is to benefit the Navy, we feel that in the long run all mankind will be benefited by our work."

As I drove out the gate at NTC, I noticed in the dashboard mirror, traces of white powder in my hair where the electrode paste had dried. Small price to pay, considering the potential of APP. ⚓

TEXAS NAVY

BY W. CRAIG PUGH

Catapulting *Phantom* jets skyward as she went, the carrier USS *Concho* sliced through the West Texas waves while thousands of spectators cheered her on to the rendezvous. Obviously, *Concho* was not involved in one of the Navy's typical fleet operations, yet many people stationed at Goodfellow Air Force Base in Texas didn't mind one bit.

Concho, it seems, is only 32 feet long—her planes are plastic models—and her operational area is a tame little West Texas river. But the crew is genuine—two Navy petty officers giving it their all.

For the second time in as many years, the Navy people attached to the tri-service Cryptologic Training Facility at Goodfellow built and "sailed" their Navy float in San Angelo's "Fiesta del Concho." The event is a solid week of Texas style fun-in-the-sun featuring carnivals, art shows, horse shows and water skiing. USS *Concho* is the result of a river barge, a hundred dollars, a lot of design and imagination, and the "can do" attitude (usually reserved for SeaBees) displayed by the 50 Navy people at the command. The Navy group at Goodfellow now bills itself as the West Texas Plains Navy.

Since arrival in 1966, this permanent detachment has quietly gone about doing what they do best—training sailors in the latest electronics intelligence gathering techniques. Most instructors are language experts and all have been in the field as technicians. They are a close-knit band of displaced salts who do their best to retain their Navy spirit on the Texas plains—thus their interest in building and manning USS *Concho.*

The West Texas Plains Navy was "born" in February 1976 when a San Angelo spokesman asked the local

Chief Petty Officers Association if the Navy would be interested in designing and building a float with a Bicentennial theme and entering it in the upcoming fiesta. Senior Chief Cryptologic Technician Dick Perfetto jumped at the opportunity since "we felt we could represent the Navy in the nation's birthday celebration as well as anyone."

Cryptologic Technician 1st Class Bob Broene, who had built a number of model sailing ships, did the designing with his wife's help and that of another sailor, Cryptologic Technician 1st Class Bob Mistishen. "Within three or four days," CT1 Mistishen said, "we had a sailing ship—everything was in perfect 1:72 scale, except the crew, that is!"

Local Navy wives created uniforms depicting various eras and fitted them individually to *Concho's* crew and escort. Represented were a Revolutionary War Marine, an 1812 midship- an 1868 enlisted man, a Navy nurse (circa 1917), a Marine in the Corps' current fighting uniform, and a sailor in the traditional bell bottoms.

When the big night came, the helmsman, Cryptologic Technician Seaman Dan O'Brian, thrust *Concho's* engine into gear and she charged out upon the torch-lined river as a full-blown, old-time sailing ship. Both banks of the river were illuminated and the crowd in the shadows roared their approval. All along the cruise route downstream, the crew sang sea chanties.

"When we cruised down the river," CT1 Mistishen said, "it made us feel so proud, we wanted to keep on to the Gulf of Mexico. It was a great way to let people know the Navy is around."

This year history repeated itself at the fiesta. However, *Concho* had been "modernized"—she was decked out as an aircraft carrier. Lifelike *Corsairs* and F-4s "roared" off her flight deck while helicopters "hovered" around the carrier's island. With a crew of two, *Concho* typified the theme—Horizons—and was dubbed "part two" of San Angelo's Bicentennial's Heritage and Horizons idea.

In 1976 she was a sailing ship, in 1977, a carrier, and in 1978: ". . . What would really be nice," CT1 Mistishen said, "is two or three floats linked together to make an armada." They do think big in Texas!

One thing is sure—they will take particular pains not to let San Angelo's citizens forget "their" Navy. ⚓

Mail Buoy

USS Little Rock

Sir: In the September '77 Mail Buoy section of All Hands, readers disputed whether the USS *Little Rock* (CG 4) was the first U.S. warship to visit Alexandria, Egypt, since World War II and that she was the only foreign warship to take part in the reopening ceremonies of the Canal. I hope the following will clarify *Little Rock's* claim to fame in the Suez Canal: *Little Rock* was the only foreign man-o-war to transit the Suez Canal from Port Said to Lake Timsah on the opening day ceremonies of the Suez Canal. The other ships mentioned (in other Mail Buoy letters) may have been at anchor in Lake Timsah but they did not transit the canal as part of the official convoy. *Little Rock* was also the first U.S. warship to visit Alexandria, Egypt, after World War II "officially" due to an official port call made with Commander, Sixth Fleet embarked. I believe USS *Guam* or another amphibious ship was there before the *Little Rock's* visit, but then again, it wasn't official.—QM1 O'Donnell.

- *Since Petty Officer O'Donnell was LPO of* Little Rock's *Navigation Division during her transit of the Suez Canal, he ought to know. As far as who got to Alexandria first—either officially or unofficially—we're going to duck the opportunity to ask if anyone else has any more claims to that title.*—Ed.

Submarine Weaponry

Sir: About three years ago you ran an article in your magazine about a submarine that was commissioned in the late '30s or early '40s that had a 16-inch cannon on it. I am wondering if it would be possible to obtain a copy of that particular issue?—GMG1 H. E. Mowery.

- *After rummaging through our files without success, we finally turned to the Naval History Division for help in answering your question. They tell us that no submarine, U.S. or foreign, ever mounted a 16-inch gun. During World War I, the British Navy laid down four subs, M1, M2, M3 and M4, mounting a single 12-inch gun in an elevation-only mount forward of the conning tower. The first three were completed; M4 was never finished. The gun had to be loaded on the surface; the boat then submerged, and the conning officer sighted through the periscope with the muzzle just above the water. This system apparently worked—at least from a mechanical point of view. How effective it was seems to have been something else.*—Ed.

Hazardous Duty?

Sir: I am presently serving with a LAMPS detachment aboard a fast frigate. The question I have is why Flight Deck Hazardous Duty Pay is not authorized for the LAMPS community.

As crew leader for my detachment I can honestly say it is definitely a hazard any time flight operations are conducted. Operating with LAMPS is a new experience and a challenge. Safety is a never-ending chore. It is not unusual for my crew of nine men to work a 13- or 14-hour day and then be called to flight quarters after a few hours of sleep. The men are tired and here we are launching our LAMPS Helo on a flight deck smaller than a basketball court.

I could go on and on with all the hazards which evolve during one flight evolution but the point I'm trying to make is why does someone have to get killed before they recognize our flight deck is just as hazardous as an aircraft carrier.—M.H. Niedzwiedz, ADC, USN.

- *The intent of hazardous duty pay is to provide an incentive for adequate numbers of personnel to volunteer to perform duties which have been proven to be of an extra hazardous nature. In the past, the requirement to prove the hazard statistically has been stringent. A recent request from the rotary community for inclusion in flight deck hazardous duty pay (including the operation of Harriers) was not adequately supported by injury/death data and was not approved.*

Because of the excellent safety record maintained by ships and squadrons involved in LAMPS operations, the overall accident rate for these operations is negligible, far below that required to justify flight deck hazardous duty incentive pay.—Ed.

Women LDOs

Sir: As a career-oriented Navy enlisted woman, the Limited Duty Officer program would provide an excellent opportunity for a commission. However, the eligibility requirements specifically state you must be a male petty officer. Has there been any type of proposal to change this requirement?—S.A. Winfree, RM2.

- *You are certainly correct that present law restricts appointments as limited duty officers to males. There are considerable differences in the law regarding provisions for men and women.*

This situation has been a matter of concern for some time, and two separate initiatives have been undertaken to change it. The Defense Officer Personnel Management Act (DOPMA) is a comprehensive, joint service sponsored bill which, among its many provisions, removes the differences in current law regarding the appointment, promotion and retirement of men and women officers. DOPMA was introduced in Congress in 1974, and was overwhelmingly approved by the House last year, but has not yet been passed by the Senate. Additional legislation is being drafted which would include the provisions of DOPMA as they pertain to women. It is intended that this proposal be submitted to Congress, should for some reason, DOPMA fail to be enacted. Either of these proposals would authorize the appointment of women as limited duty officers.—Ed.

Reunions

- USS *Davis* (DD 395)—Reunion in 1978. For information contact David S. Fowler, 351 Darlington Dr., Buffalo, N. Y. 14223.
- Recruit Company 1901 (1944), Naval Training Station, Great Lakes, Ill.—Contact Elwood East, 2201 Clays Mill Rd., Lexington, Ky. 40503.
- USS *Lexington* (CV 2)—25th reunion May 10–13 at Orlando, Fla. for crew, squadrons and Marines serving 1927 to May 8, 1942. Contact Walter D. Reed, 5410 Broadway, #105, Oakland, Calif. 94618.
- USS *Tennessee* (BB 43)—Reunion June 16–17 at Denver, Colo. Contact Edward Frause, 4682 S. Pennsylvania. St., Englewood, Colo. 80110.
- USS *Implicit* (AM 246)—1945–46 crewmen write or call collect Robert W. Evett, 10 Gunpowder Rd., Baltimore, Md. 21234. (301) 665-6900.

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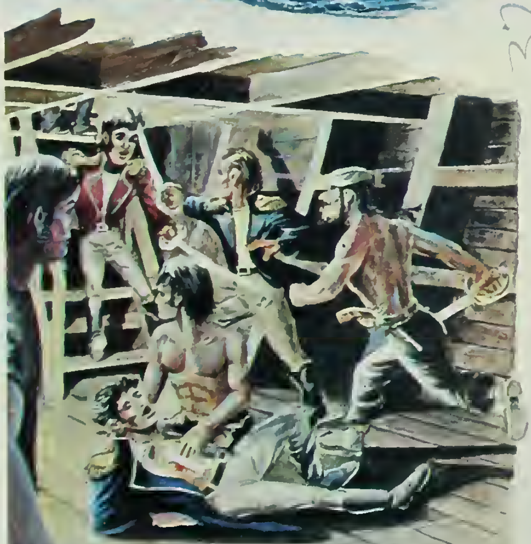
• SEASON'S GREETINGS •

James Lawrence

Captain USN



THUNDEROUS EXPLOSIONS RUPTURED THE DESERT NIGHT. GIANT FLAMES REVEALED SURPRISED TRIPOLITAN PIRATES IN FRENZIED ACTION AGAINST AMERICAN INTRUDERS. IT WAS TOO LATE. THE RAID ON TRIPOLI HARBOR HAD BEEN SUCCESSFUL AND THE AMERICANS MIRACULOUSLY ESCAPED BACK TO THE OPEN SEA. THE YEAR WAS 1804, DURING THE WAR WITH TRIPOLI. LT LAWRENCE DISTINGUISHED HIMSELF EARLY IN HIS CAREER AS A MEMBER OF THAT SMALL FORCE. THEIR PLAN, BOLD AND APPARENTLY SUICIDAL, HAD THE SOLE PURPOSE OF ENTERING THE EXTREMELY WELL-FORTIFIED TRIPOLI HARBOR AND DESTROYING THE CAPTURED AMERICAN FRIGATE *PHILADELPHIA.*

DURING THE WAR OF 1812 AND ON FEB. 24, 1813, MASTER COMMANDANT LAWRENCE IN COMMAND OF *HORNET* ATTACKED AND DEFEATED *HMS PEACOCK.* HIS EFFORT TO SAVE HIS PRIZE, WHICH BATTLE DAMAGE HAD LEFT IN A SINKING CONDITION, RESULTED IN DISASTER. SHE SUDDENLY ENDED UP AND SANK BOW FIRST CARRYING WITH HER AMERICANS AND BRITISHERS ALIKE. THIS UNFORTUNATE DEVELOPMENT PRESENTED AN OPPORTUNITY FOR OTHER PRISONERS TO ESCAPE. NEVER-THE-LESS HE BECAME A NATIONAL HERO AND WAS PROMOTED TO CAPTAIN.

"DON'T GIVE UP THE SHIP," THIS FAMOUS PHRASE, UTTERED BY THE MORTALLY WOUNDED JAMES LAWRENCE, BECAME A SUBSTANTIAL PART OF OUR EARLY NAVY SPIRIT AND TRADITION. IT OCCURRED ON JUNE 1, 1813 DURING THE FIGHT BETWEEN *CHESAPEAKE* COMMANDED BY LAWRENCE AND *SHANNON* COMMANDED BY PHILIP B.V BROKE. LAWRENCE FELL EARLY IN THE FIGHT AND *CHESAPEAKE* WAS BADLY DEFEATED. IT WAS SAID THAT BROKE RECEIVED A HEAD WOUND DURING THE FIGHTING THAT CRIPPLED HIM MENTALLY FOR LIFE. LAWRENCE WAS BORN IN BURLINGTON, N J. OCT. 1, 1781 - DIED JUNE 4, 1813 IN NOVA SCOTIA. HIS BODY LIES IN TRINITY CHURCHYARD IN NEW YORK CITY. HE WAS 31 YEARS OLD.

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LAD